THE

PHILOSOPHY OF SPIRITS

IN

RELATION TO MATTER:

SHEWING

THE *REAL EXISTENCE* OF TWO VERY DISTINCT KINDS OF ENTITY
WHICH UNITE TO FORM THE DIFFERENT BODIES THAT COMPOSE
THE UNIVERSE, ORGANIC AND INORGANIC,

BY WHICH THE PHENOMENA OF LIGHT, HEAT, ELECTRICITY,
MOTION, LIFE, MIND, ETC.

ARE RECONCILED AND EXPLAINED.

BY

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"Remember that thou magnify His work which men behold. Every man may see it; man may behold it afar off."

JOB, xxxvi. 24, 25.

LONDON:
SAMUEL HIGHLEY, 32, FLEET STREET.
1850.

Wilson and Ogilvy, 57, Skinner Street, Snowhill, London.

"NEWTON was eminent above the philosophers of his time, in no one talent so much as in the power of mathematical deduction. When he had caught sight of the law of universal gravitation, he traced it to its consequences with a rapidity, a dexterity, a beauty of mathematical reasoning which no other person could approach; so that, on this account, if there had been no other, the establishment of the general law was possible to him alone. He still stands at the head of mathematicians as well as of philosophical discoverers. But it never appeared to him, as it may have appeared to some mathematicians who have employed themselves on his discoveries, that the general law was an ultimate and sufficient principle: that the point to which he had hung his chain of deductions was the highest point in the universe. LAGRANGE, a modern mathematician of transcendant genius, was in the habit of saying, in his aspirations after future fame, that NEWTON was fortunate in having had the system of the world for his problem, since its theory could be discovered once only. But NEWTON himself appears to have had no such persuasion that the problem he had solved was unique and final: he laboured to reduce gravity to some higher law, and the forces of other physical operations to an analogy with those of gravity, and declared that all these were but steps in our advance towards a first cause. *Between us and this first cause—the source of the universe and its laws—we cannot doubt that there intervene many successive steps of possible discovery and generalization,* not less wide and striking than the discovery of universal gravitation: but it is still more certain that no extent or success of physical investigation can carry us to any point which is not at an immeasurable distance from an adequate knowledge of Him."

WHEWELL'S BRIDGEWATER TREATISE.



PREFACE.

I AM too well aware of the infirmities and shortcomings that are to be traced throughout the following pages, not to feel the utmost diffidence in submitting them to public opinion.

A very cursory glance at them, however, will be sufficient to satisfy the reader that they have been put together not for the purpose of elucidating scientifically or systematically the different subjects here touched upon, but for the carrying out of the theory which is here for the first time propounded.

The vast extent of scientific subjects embraced; the general, historical, biblical, and classical knowledge required to illustrate, as ought to have been done, many of the points that could not here be well passed over in silence, will, I trust, be a sufficient apology for

any oversights I may have been guilty of, in a work purposely comprised within the compass of two or three hundred pages.

The one great point constantly borne in view throughout the work, has been to shew, in the clearest and simplest manner, the real amount of proof we possess, by the combined assistance of philosophy and revelation, of the real existence and operation of spirits of different degrees of power, and of their relation to matter.

The existence of spirit I assume to be fully ascertained through the medium of revelation. I have, therefore, in the first chapter dwelt shortly upon the claims this particular and supernatural source of evidence makes upon our belief. After this, I go on further to prove the existence of spirit, by shewing in what way it may be detected in the analysis of natural bodies.

Having thus proved the existence of spirit through that authority that cannot reasonably be disputed, and subsequently by natural and experimental philosophy, there remains a question of paramount importance, as relates to the subject before us. What is this spirit? The answer to this question will be found to occupy

a large portion of the remainder of the book. If, however, the reader expects that in answering this question I am about to give a dissertation upon the abstract nature of spirit, he must inevitably be disappointed, for I have certainly no more capability than any other individual of speaking of the nature of spirit in the final or abstract sense of the word, though I may prove its existence, and the qualities or phenomena that result from it. The same observation applies with equal force to any attempt we may make to penetrate into the abstract nature of matter.

Nevertheless, as we recognise the qualities and phenomena of certain bodies we term created bodies,—that is, of bodies as we behold them to have been created or put together by the Infinite Jehovah,—I shall be able to shew that those qualities and phenomena are not the result or proof of the existence of bare abstract matter, any more than they are of abstract spirit, but that they follow as the natural result of the union of these two distinct kinds of entity in the organic world, in the same way as we observe to be the case with those created bodies we designate by the title of organic or living bodies. And that form, consistence,

colour, taste, &c., as qualities; and light, electricity, motion, life, &c., as phenomena, are the result of the union of these two kinds of entity. And in the analysis of created matter I have endeavoured to shew that both kinds of entity may be detected and proved by instruments to have been in a conjugate state as constituting that created matter.

It is certain we can no longer be contented to receive that negative definition of spirit which, inasmuch as it had not been detected as a separate entity from matter, it has received at the hands of all those who distinguish it by the title of "imponderable matter." Neither can we be content to call it a "force," for this is only to define it by its effects; and we may as well say that colour is the same as that which produces colour.

These two expressions, "imponderable matter" and "force," are as different from the true interpretation of the cause they partly proceed from, as strength is from the arm that displays it, or magnetism is from the iron through which it is manifested. What philosophers call either "imponderable matters" or "forces," are neither of them entities, like spirit or matter, but mere effect, which follows the

union or application of these two entities in different ways.

It may be asked, then, do these phenomena which I presume to proceed from the action of spirit upon matter possess the power of producing themselves? Does motion, for instance, which is a phenomenon resulting from the action of the spirits of heat and electricity upon matter, produce itself?

This question may most satisfactorily be answered by the theory of spiritual entity I have propounded. For there it will be found that all spirit is not one and the same; but on the contrary, there must be several kinds of spirit, having degrees of power and qualities peculiar to themselves, and graduated in such a manner as that one kind is superior to the other. This is to be with certainty gathered from revelation. It is also to be inferred, and I believe proved, by a proper method of philosophical induction.

And in the investigation of all the circumstances which mark the characters of the different spirits, we shall find these characters to be distinctly defined and sufficiently clear to confirm the general fact that spirits are different in kind and degree, though they may

not so decidedly prove how many they are, or what exact relative position they hold.

No sort of doubt can reasonably exist that they are all in the power, disposal, and subservience of the Great Jehovah; and that, as efficient causes in his hands, they are possessed of very different kinds of power over matter. Those that are brought to bear upon inorganic matter are limited in their operation to the production of the natural bodies, and natural laws unalterably decreed that they should produce.

We do not here observe the phenomenon of *voluntary* motion, though we do that of motion, and this shows that motion, as it is fixed in the phenomena of inorganic bodies, is one inferior in degree to that of voluntary motion. It would not be correct to say the heavenly bodies, for example, move themselves in the same manner as I now move my pen, for their movement is limited to, and regulated by, certain fixed laws. Not so my pen, which I can move or not as I please. But the spirit that furnishes to me voluntary motion may be withdrawn from me, and then I no longer can perform that phenomenon. Thus, even voluntary motion is subservient to a higher spiritual power

that controls the spirit that produces it. We cannot, therefore, believe voluntary motion even can produce itself beyond the finite power of the spirit that is in the body producing it; and, as we have no power over that spirit, it cannot be said that voluntary motion has power to produce itself, still less can it be affirmed so of ordinary motion.

The prevalent idea of spirit has been circumscribed within that of a *conscious being*. But the consciousness of our own existence is the result of a highly complex degree of knowledge, which, as far as we have any experience, is confined to the spirit of man, and which comes to him by the aid and co-operation of other spirits, which must first be brought to act upon matter before consciousness can be produced.

To make consciousness a mark of distinction by which to recognise spirit, is to borrow a mere quality of the mind from a cause not hitherto regarded apart from the spirit so made conscious. But what is consciousness? The answer to this question will be sufficient to bring conviction to the mind that spirits in a less compounded, or rather in a less exalted sense, exist in the first place as in the case of the simple inorganic modes of union, before

they can combine to form the more elaborate modes of union in animal organization, by which consciousness is manifested.

In proof of the existence of spirits that are subordinate to each other in their powers of operation upon matter, as all are to the Great First Cause, I have been anxious to show what are the *modes of union*, and what are the *modes of action*, of these different spirits: that the modes of union are first simple, as in the inorganic world, and, *through these*, they become more compounded, as in the organic world; that the same appearance of gradation will be found to characterise the different modes of action in all natural bodies. And hence we have many structures requiring the co-operation of several kinds of spirit before they can be built up; and we have many phenomena produced through those structures, which alike are dependent upon several kinds of spirit before they can be produced.

This is well exemplified by a reference to the operation of mind. Mind is a mode of action by which the characters and qualities of everything around are depicted. It is the great archetype of created things, and in its operation affords the highest example of the most intri-

cate phenomena that can result from the most elaborate union of the same spirit and the same matter, it is constructed to contemplate in all created bodies around.

To accomplish this, we shall be able to trace the distinct operation of several spirits, according to subordinate order, each of which contributes its indispensable power towards the end in view.

The action of these spirits upon matter after they have been first employed in the production of different modes of union, is important to be borne in mind. For the phenomena thus resulting constitute all those correlative forces hitherto treated as imponderable agents, or as a very attenuate kind of matter. But without wishing to hypostasize these forces, or to give them place among the entities of creation, there is the greatest reason for regarding them as the result of the application of spirit to matter precisely in the same relation as mind stands to the spirit of life, which, being brought to bear upon the material part, the brain, produces it.

The characters which mark the presence of the spirit of life in animal organization will be found to have a common resemblance to those

which I contend mark the presence of other and subordinate spirits in created matter. Thus, the spirit of electricity closely resembles that which goes to form the mind, in that particular power they both possess of spanning objects immeasurably distant from each other, as it were synchronously. All possess alike, as spirits, the character of indivisibility, and all possess the power of imparting the characters of divisibility to a greater or less extent to every created substance they help to form. All are alike without weight, all are invisible.

Yet the existence of spirits being a doctrine of revelation, where they are represented with degrees of rank and power, the fact being there furnished to us, there seems the most ample reason to infer that inasmuch as some of the same general characters which distinguish the higher spirits of life, of man, and of angels, are to be traced in bodies that are less complicated or organized, such spirits do really exist. That degrees of power and subordinate operation should be reposed in spirits that bear a corresponding relation to the material and inorganic parts of the creation, is neither improbable nor unreasonable; and though it is furthest from my wish to be dogmatical in what I here bring

forward, I have nevertheless the strongest impression that other minds, higher and nobler, and better fitted for the task, will, by this theory, eventually be enabled to reconcile the many conflicting phenomena now awaiting a true explanation, and which will trace them up, through the aid of subordinate and converging spirits, to the great God that made them.

C. M. BURNETT.

October 1850.

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THE

PHILOSOPHY OF SPIRITS

IN

RELATION TO MATTER.

CHAPTER I.

(INTRODUCTORY.)

THE RESPECTIVE CLAIMS OF NATURAL AND REVEALED PHILOSOPHY UPON OUR BELIEF.

In attempting to write a work, or to propound a theory, in which philosophy and revelation are mutually enlisted and appealed to for evidence to elucidate one of the most mysterious, difficult, and practically important subjects that can engage the human mind, as it stands related to the physical and moral government of the world, it may be thought necessary, and indeed indispensable, that in the first place something by way of argument should be brought forward in support of the just merits which these two great sources of all knowledge demand at our hands.

And while I find myself totally unable to advance in the discovery of this important inquiry without the co-operation of both kinds of evidence supplied to me from these two very different and distinct sources, I do not find that either philosophy or revelation demand an unreasonable or an unconditional belief in the truths they each of them propound; but, on the contrary, I am, in appealing to them, compelled to admire the noble and indisputable proofs,—the clear and tested evidence they mutually afford, in their own intrinsic way, of the power, the attributes, and the works of the one great, universal, and benevolent Creator.

If philosophy makes, therefore, any demand upon our belief, it is only on account of the very high and complete order of evidence we have received of its truthfulness and stability,—an evidence that forces us to rely on its statements, when we are enabled to be assured these rest not upon mere inference, or analogy, or unsupportable rules, but upon a true and scientific method of induction, which, like the centre of attraction, makes many facts to converge and bear upon one point; or upon true syllogistical reasoning, where the premises bear a just and logical relation to the conclusion.

Yet philosophy alone, however nearly it may approach to truth, dependent as it is on the progressive attainments of the human mind in the advancement of learning and inductive science, is at all times exposed to the disadvantages, in contemplating subjects so exalted, which must necessarily result from a capacity

limited to the consideration of those that alone can be assigned to it more equitably.

And it must not be forgotten, that upon many most important points relating to the physical as well as to the moral condition and position of man upon this earth, as he stands related, not only to the Creator, but to the different matters and bodies that surround him, philosophy is almost wholly silent, possessing little or no power or means to unfold them; so that we are called upon to be most scrupulously correct and vigilant, before we receive and acknowledge as axioms of science such statements as we know to be beyond the boundary of human learning or natural philosophy to determine. Such are those statements that would attempt to explain the *abstract nature* of causes; for natural and mental philosophy can only treat of or expound those causes, termed *efficient causes*—or, to speak more comprehensibly, *created causes*—as they stand related to, or are made manifest by, created matters.

On the other hand, the claims which revelation makes upon our belief are of the very highest order, demanding assent upon grounds, not only equally secure and extended with those of true philosophy, but also more diverse and incontestable in character. For here we have statements, not put forth upon the assertions of mere tradition, or of testimony,—not resting upon any one or two proofs, but on such as are based upon its own internal and inherent evidence, and drawn from the most accurate fulfilment of the prophecies it contains.

Moreover, we have incontestable proof that our Saviour literally quoted it; and, finally, we possess the most incontrovertible of all proofs of its integrity—viz., the fact of its containing so many thousand statements of things, persons, and events, not one of which has ever been disproved.

With gratitude and thankfulness to God, the Christian philosopher is therefore called upon to repose his hope and belief in revelation upon every diversity of proof which it is possible to bring before the human mind. For it is truly incompatible with the love and mercy of a Being infinite in wisdom towards that creature upon whom more especially he has bestowed the noblest and highest privileges, to suppose that, having revealed to him his great power and transcendent love, which we could learn by no other means, he should suffer that revelation to rest upon a single kind of evidence, and that an imperfect one. This can never be received in extenuation when the sceptic and the infidel stand before the Ancient of Days to receive that punishment for their unbelief in a revelation so unmistakeably attested. For the ground on which revelation stands is of that broad and immovable character, that the appeal she makes upon all for credit in her statements is most powerful; and he who attempts to erect the elaborate superstructure of natural philosophy upon a foundation that takes reason alone for its base, can receive no harder rebuke than that which his own favourite authority must convey, when it tells him it is inconsistent with revelation.

And if this Word of God is so pure and unadulterated that the holy psalmist compared it to "silver seven times purified and refined," it must surely be a higher test of truth than the mere unassisted wisdom of man.

And here I would add, there can be no more powerful argument brought down to the level of man's reasoning, in proof, not only of the truth, but also of the necessity and use of revelation, than that which is implied in the fact, that to contemplate such a revelation as simply conveying the mere testimony of events which occurred in the world at former periods of its history, or its existence, and not also as the message of statements which could never have been discovered by man simply through the instrumentality of his own faculties, implies, on the part of the Divine Author of our existence, an act of supererogation we should hardly suppose an intelligent created being could be capable of committing.

To those, therefore, who are unprepared to answer this question put to them by doubting philosophers—viz. Why was revelation given to man?—I here state it is essential that the Scriptures should have been revealed to us, because without them we could never, by any faculties or powers of our own, have been put in possession of facts there so confidently and so irrefragably made known to us.

It sets out with disclosing to us events which could never have been known in any other way, and which, at the same time, we can never disprove; and in this position it stands boldly out, in its own strength, an unrefuted history of the unsearchable wisdom of God

in the beginning, when, by his almighty spirit and ever-blessed Son, "He made the worlds."

But though revelation is, in our day, more especially admitted by many to be inspired, and to have been dictated by supernatural means, yet the sacred historians and writers thus employed to propound its statements are nevertheless considered, I fear, to have delivered themselves upon philosophical subjects, and those not immediately relating to the moral condition and relations of man, with no little obscurity and want of precision, and certainly without any regard to the dictates of what *they* consider to be true philosophy.

But lest the faith of the believer in revelation should be shaken by this plausible assumption, let me remind him that this is the grand shaft the great adversary of truth is continually hurling at the philosopher. It is not important to the interest of this great opponent of truth and light, that revelation, in some of its more apparently difficult parts, should be shaken, and, if possible undermined; for he is well aware that if he succeeds in invalidating one part by casting it into the fathomless abyss of doubt, or by attaching to it the infirmities and contractions of human composition, there is a greater chance of subverting the whole moral weight it conveys.

The reader will therefore be prepared to contemplate revelation as a whole, and not as a part. He will regard its statements as correct, not merely in relation to moral truth, but as giving accurate and unanswerable physical information on the subjects upon which it treats.

There is, then, a value to be attached to the evidence

of truths drawn from philosophy, which is of high importance; and there is also a value, though of another and very distinct character, to be attached to the evidence of truths, whether moral or physical, drawn from revelation: and their separate, as well as their united testimony, by adding strength to strength, conjunctively bring to bear upon the subjects they unfold a weight of evidence which is actually incontrovertible.

Thus guarded, philosophical truth has nothing to fear from its enemies; for revelation, resting its assertions upon the invariable nature of the work of God, not only challenges those truths for the proof of the reality of her statements, but makes one of the strongest evidences of her truthfulness to rest upon the unchangeable fidelity of all natural laws which philosophy seeks to investigate. On this stable foundation, true philosophy places her corner-stone; and no system can find a resting-place in any other.

And that we may ever possess this as one of the invaluable proofs of the reality of all that is revealed to us by the God of Truth, we are permitted to assure ourselves, that nothing conveyed to us in revelation is *inconsistent* with our reason.

There may be, and there are, many statements therein contained which are beyond our comprehension, that are "high as heaven, what canst thou do? deeper than hell, what canst thou know?" but there is nothing there recorded which can convey to our minds a doubt as to its rational probability.

But the very rare and extreme value of revelation is

educed not simply where it accompanies and confirms true philosophy, as they go together as handmaids of eternal truth, but in that important of all points, viz. the act of its taking up the subject where reason and philosophy may strictly and safely be said to end, and conducting it, single-handed as it were, up to its only source.

How much need was there, therefore, that revelation should have been so fortified and prepared to stand the test of every crucible into which it might be thrown; and to this end. how necessary was it that it should be confirmed by evidence still more powerful and unshaken than any we may bring forward in confirmation of philosophical truth, seeing it stands alone upon the high and lofty ground it has taken up.

We thus see a purpose answered in giving to man that kind of assurance of the existence, the attributes, and the decrees of God, which revelation affords, and by which he becomes acquainted with such truths as it was impossible for natural philosophy alone to furnish. And therefore, when these truths are confirmed to our minds by the surest of all tests, viz. the concurrent testimony of the different kinds of proof that have been placed within our reach, by the supernatural power of God, and by which means he has so mercifully permitted us to be assured of their unalterable reality, we can safely rest and act upon them with the confidence they are intended to inspire.

To natural philosophy we are indebted for much of the information we possess of what have been termed

the laws of nature, and the influence these laws exert upon the matter that surrounds us. We are thus also made acquainted with the nature of the elementary materials of which our earth is composed. In the investigation of these laws, many of which are made known to us with a certainty founded upon their invariable modes of action, that places them beyond all possibility of doubt, a very general belief prevails, that the entire universe, as well the worlds composing our solar system as those of systems far more remote in the depths of space, has been created by one and the same all-wise and all-powerful Being; that these worlds have been endued with certain properties, or forces, or laws, by which they become relatively united and connected, and by which they are sustained.

Yet it must be remembered, that though natural philosophy recognises these laws, and observes with precision the many phenomena and modes of action they induce, she has on no occasion proved them to be the result of anything inherent in matter alone; and if, therefore, they are not the effect of anything that is material, it is the more probable they are the result of something that is immaterial, or that does not partake of the character of material substance; and I think there is more than common evidence to show that these forces or laws, as they are called, are the result of some *substantive* and distinct, though immaterial and dependent spirits, while acting upon material matter.

From the observations I have made upon the power and use of revelation, it will appear reasonable that in

subjects so exalted and difficult of comprehension, philosophy will in contemplating them, imbibe fresh strength and light, by following her, rather than by taking the lead. She would be more indelibly impressed with that profound and majestic truth, that God not only made the worlds,—that is, the apparent material created matters composing them,—but that in doing so He also created the separate elements or primary principles of those created matters; which principles were not only of the character we call material, but were united to others that were in their qualities not material. He therefore created other substances that were of an immaterial nature, and by these He brought materiality into light, order, and beauty, and made them manifest to our senses.

And this course would have contributed, had it been invariably pursued, to have established a point of great magnitude and singular importance, which natural philosophy alone has never yet discovered. This fact is, *that there are two very distinct and characteristic kinds of substances, both alike as entities, but totally different and opposite in their nature, which, by a power inscrutable to us, the Creator has made to act the one upon the other in the production of all those qualities we observe to characterise the natural bodies around us, and of all those phenomena hitherto termed the laws of nature; and that these two very different substances are found to exist in the universe under two distinct forms: 1st, in union, as we find them locked up together in the construction of every natural and created body, in which state of combination they pro-*

duce the qualities of form, size, colour, consistence, taste, &c.; and, 2dly, in a separate and uncombined state, as we find them existing in the atmosphere, whence they are taken as they are required to form new synthetical unions in the construction of vegetable and animal structures, as well as to produce the phenomena of light, heat, and electricity, by which these structures are partly sustained. In this uncombined state they also act upon created matter to the production of the great forces necessary for sustaining the different celestial bodies in their relative positions and motions.*

We accordingly find the philosopher searching in vain for any proofs, apart from revelation, of the real

* It is necessary here to observe, that in the following pages I have used the terms *quality* and *phenomenon,* or *mode of action,* in two very distinct but different senses. I regard the qualities of bodies—1st, to be the permanent result of the union of the two entities as they are found combined in the natural creation: as long as these entities are united, the qualities of created bodies are palpable,—such are form, size, colour, &c.: 2d, as descriptive of the characters of the entities before they are combined. Thus indivisibility is a quality both of uncombined material and immaterial substance, while ponderosity is a quality of uncombined material substance only; and this it gives to created natural bodies also, but it is not a quality of immaterial substance in its uncombined state. By phenomena or modes of action I mean such effects as are produced by the application of one or both of the uncombined entities to created matter. Thus the spirit of electricity, applied to iron, which is a created body composed already of the two entities, produces the phenomenon of magnetism, and the spirit of heat applied to the diamond produces the phenomenon of the solar phosphori, &c.

and separate existence of either of these substances, material or immaterial, in the universe; and hence the confusion in the writings of so many philosophers who have hitherto sought to prove, from the science of philosophy alone, that there is evidence to determine, according to the different views they entertain, either the entirely material or the entirely immaterial origin of all things.

The very method by which material bodies are made to act upon our senses, in the first instance to convince us of their real existence, could never be accomplished by material substances of a like nature to themselves, and unassisted by other substances* of a different nature, which are, in fact, created spirits; and accordingly, as we find the same wonderful contrivance resorted to by the Creator in bringing into sensible existence the whole living creation, so here, in the first instance, we behold Him, by means of a power which He alone possesses, bringing immaterial substances to bear upon those that are of a material nature, by which means

* I use the term substance here to imply *uncombined immateriality* as well as *combined materiality*, the nomenclature of artificial language furnishing no word to express created spirits or created materiality before these are united in the works of the natural creation. As I shall frequently, in the course of these pages, have occasion to use the word substance as applied to immateriality or spirit, I will here observe, once for all, that upon those occasions I use the term conventionally, qualifying its meaning by the antecedent adjective, and without any regard to the characters that distinguish created substances as they are observed on our globe.

they are brought out of the simplicity of uncombined chaos into beauty, order, and consistence.

The evidence I shall presently adduce to demonstrate the real and separate existence of material matter in the universe, will, if supported by sound philosophical reasoning, as clearly show that this kind of substance was in its primordial condition, and, before it was acted upon by substances of an essentially different and immaterial nature, as much an act of Divine creation as were the immaterial or spiritual substances which He also created. Nor has the one any power to annihilate the other: and this appears to offer a most sufficient physical argument to prove that those phenomena heretofore thought to be imponderable substances,—such as light, heat, electricity, &c.—are really in their nature neither material nor immaterial, but are, like their kindred phenomena of life and mind, the result or mode of action of the combined operation of one, two, or more of both kinds of these two great entities upon each other.

I think there is also a very clear and satisfactory proof of the real existence of these entities as distinct from each other, not only as entities, but as different kinds of the same entity. To make this appear plainer, I would, for example, say there is not only proof that the spirit of heat or of electricity is distinct from the matter of oxygen or hydrogen; but there is proof also that the spirit of heat is different from the spirit of electricity, and the matter of oxygen from the matter of hydrogen.

In revelation, allusion is often made both to visible

and invisible created things,* which can only point to the fact that they are only so to us, as we have no senses but those which recognise the unions of the two entities in the natural creation, or as they are in juxtaposition. But God sees them when to us they are invisible; and hence the truth of that Scripture—"Yea, the darkness hideth not from Thee, but the night shineth as the day; the darkness and the light are both alike to Thee."

It is, then, from revelation alone, and not by the assistance of either physical or mental philosophy, that the mind is put in possession of the real existence, in a separate and independent state, of two distinct classes of substances possessing characters and identities peculiar to themselves; and it should be attentively observed, that neither the one nor the other class could be separately and disunitedly detected by our senses; for this can only take place by their mutual conjunction or their mutual juxtaposition. The ultimate elements of material bodies would be as invisible to the eye of sense, without the concurrence and the presence of immaterial substances, as these, on the other hand, would be invisible without the co-operation of material substances. Both are alike invisible and incapable of detection, before they are united or brought in contact in the works of creation.

I repeat, then, that much authority ought to rest on the philosophy of revelation upon this point, and there-

* Col. i. 16; Rom. i. 20.

fore I have been the more anxious to give a short argument to support and to enhance the general impression of its value. From thence we must undoubtedly collect this fact, that two very distinct kinds of substances are found to have been created by God from the time He first made them manifest to us; and hence the Apostle Paul, in alluding to the means taken by the Creator to assure us of the reality of immaterial as well as of material things, says—"The invisible things from the creation of the world are clearly seen, *being understood* by the things that are made;" hereby evidently marking a distinction between the two, and showing their mutual dependence.

But the great and indispensable advantage which philosophy obtains in bringing to her aid the statements of revelation, does not rest here; for, however we may suppose philosophy to be capable of unfolding the more mysterious constitution, and still more inscrutable nature of uncombined material substance, we must at once confess that, in the investigation of these points in the case of spiritual entities, she is perfectly incapable of offering any explanation; for not only is *their nature* wholly incomprehensible, even when examined by the light of revelation, but their *very existence* also would have been concealed from us without such supernatural instrumentality. All, therefore, that we can learn respecting the existence, the qualities, and the offices of spiritual substances, however the truth may be confirmed by the reasonings of philosophy, must in the first instance have been made known to the

human mind through the agency of revelation. This fact receives the strongest confirmation from the writings of heathen philosophers, where many of the great doctrines first made known in revelation are found complicated and bound up with the most absurd and chimerical errors.

In speaking, therefore, hereafter of the existence, or the qualities, or the offices of spiritual entities, it is to be assumed that such information is the result of the application of sound reasoning to the facts already furnished by revelation upon the subject: nay, more than this, we have to deal there with statements which are over and above reason to either prove or disprove, and which rest there upon the sole intrinsic and characteristic authority of God's word.

Under this head we cannot fail to notice that extraordinary but at the same time unanswerable assertion, that the created spiritual entities are in their individualities distinct, while they are indivisible. This is a most remarkable truth: for our ideas of spirit are commonly antagonistic to those of matter; and it is in the character of indivisibility that we contemplate, as we suppose, a distinguishing qualification of spiritual bodies, although I shall presently show this quality belongs also to uncombined material substance.

Yet God's Word has said that the spirits of men,* as well as of animals,† are distinct and separate; and this

* Gen. i. 26, 27; ii. 7; v. 1, 2; xxxii. 30, &c.
† Gen. ix. 9, 10; Deut. xii. 23; Prov. xii. 10, &c.

must assure us that in the original creation, both of the material and immaterial entities, a supernatural agency was first employed by the Creator, which was independent of, and antecedent to, the establishment of those laws which were made unalterable from the commencement of their ordinance. After their first creation any subsequent attempt to deal with these spiritual entities in the sense of divisibility is useless, for it is well known they are not susceptible of division.

This, then, is an important fact reasonably to be deduced from the divine record, and it will be only productive of confusion if we attempt either to overlook the importance it assumes, or to explain its cause. It is as clearly to be discovered there as the doctrine of the Trinity, and even clearer; but, like that doctrine, it is beyond all human or rational interpretation. It is most certainly a mystery; but so are many things first made known to us in revelation, where they are accounted mysteries by the very writers that reveal them. The Apostle Paul speaks of that wonderful union of the nature of God and man in the person of the man Christ Jesus as being a great mystery;* for, from his conception to his death, one continued succession of mysteries attended his career upon earth. So is the resurrection of the human body, and its glorified change† into that body that shall be, a great mystery. And these, with many others, will continue to be so while the world lasts; and as such we must receive them,

* 1 Tim. iii. 16. † 1 Cor. xv. 51.

nothing doubting that they will be reconciled to, and identified with, the profoundest wisdom.

If, however, there is any one fact to be taken upon the abstract assertion of revelation, which can nevertheless, from its nature, be quite beyond a physical or rational interpretation, and which, more than any other, goes to prove the impossibility of determining all axioms by a process of philosophical induction, it is the fact of the separate existence of the spirit of man in every individual of the human family. And this at once shows the necessity of an appeal to the oracles of God in explaining some of the great points I have attempted to demonstrate in the following pages. If the spirit of man in every individual is a distinct entity, it must be complete in itself, and, though incapable of divisibility in that state, yet it must be limited, even in a disembodied state, to some kind of sphere. Here, then, we seem bound to recognize entities having qualities widely different from material entities, but at the same time having qualities that mark them distinctly from those qualities we are taught by the same authority to believe distinguish the Divine Being of God. And the necessity of referring to revelation for authority to mark with accuracy the truth of the existence of these entities as separate in their individualities, seems indispensable, while the true nature of both kinds remains untouched, either by philosophy or revelation. Bishop Butler's argument in proof of the separate existence of every individual living being, as shown in the *principium individuationis*, or principle of identity, is the clearest

philosophical proof on record of the certainty of this separate existence in every individual; simply because this proof is drawn, not from any attempt to explain its nature, or even its abstract existence, but from the analogy its real existence bears to other facts we know to be true from experience, but which we cannot explain.

It is, however, to the word of God that we first trace any real authority for believing in the undoubted and separate existence of spirits. And from the same source is to be derived another fact upon which I have taken occasion to dwell in the following pages. I mean, the *degrees* of spiritual entities; for there is evident and frequent allusion in revelation, not only to the separate existence of the different spirits of the same kind of entity, but also to different kinds of the same spiritual entity.

It requires no argument to show from the Scriptures that the spirits which animate the brutes are, as well in degree as in kind, different from those which dwell in human bodies. Moreover, those spirits which there are termed angelic, are described, in condescension to our faculties of comprehension, when united to glorified bodies, as having powers far more exalted in the aggregate than belong to the spirit of man. And hence the prophet Ezekiel represents the angels by those figures which imply that their powers and attributes are of a more elevated character than those of man, having concentrated in any one of them the courage, strength, vision, penetration, fleetness, &c. that, as distinguishing qualities only, are displayed individually, in different species of animals. And further, these superior

angelic spirits, we are there taught to believe, are composed of numerous orders, some of which have fallen from their first estate. It will be for us to consider whether these kinds of spirit have not degrees of power. Indeed, most of the statements connected with the subject of spiritual entities in the sacred records, however they may receive confirmation from the exercise of our reasoning faculties upon them, favour the idea that not only those bodies in the universe which have some sort of living phenomena about them are those which are united and kept together by a spiritual entity of some kind; but also those bodies which are, as we term them, inorganic, owe their existence, form, and properties to spiritual entities with which they are united. And we are led to this at the very outset of revelation, when we read that "the spirit of God moved or brooded upon the face of the waters." And in another part we are told, God made the whole host of creation by the breath of his mouth. He is equally spoken of as by His spirit creating all things, both organic and inorganic bodies; and the spirits of living bodies are called alike "His spirit;" as are the great works of inorganic matter represented to be the work of "His spirit."

Guided, therefore, by this light, I shall, with the joint assistance of philosophy and revelation, proceed to unfold a theory of spiritual life or existence in which are comprehended those spirits which, I contend, compose and move the inorganic matters of this and other worlds; as well as those spirits which animate the bodies of animals, of man, and of angels.

CHAPTER II.

THE ARGUMENT TO BE DRAWN FROM PHILOSOPHY AND REVELATION OF THE REAL EXISTENCE OF TWO SEPARATE AND CREATED KINDS OF ENTITY IN THE UNIVERSE, BY THE UNION OF WHICH WE BEHOLD EVERY CREATED THING.

We have now to consider the nature of the proofs to be drawn from philosophy and revelation, of the real existence of the very distinct kinds of substance which were originally created, and subsequently, in conjunction, were employed by the Creator in framing the universe,—viz. material substance or matter, and immaterial substance or spirit; for, having by the same Divine power been brought into a real and independent existence in the first instance, these distinct kinds of entity were in the subsequent acts of creation brought to bear upon, and to combine with, each other in the production of all the shape, order, beauty, and other qualities of created bodies, and when in this state to form higher and more intricate unions in the carrying out of the many phenomena and forces of those created bodies as we view them linked together in the great chain of the created universe.

Laws of the Spirits of Heat and Electricity in their union with Matter.

Before, however, I proceed to investigate these proofs, it is important I should here state my intention strictly to avoid any attempt to explain the true or abstract nature of the two kinds of entity of which I am about to speak. Their real existence I infer from the combined sources of philosophy and revelation; and the phenomena resulting from them furnish us with a series and an aggregate of facts and laws, upon the immutability and stability of which rests the true method of induction. And the truth of the real existence of these substances may doubtless be inferred with as much certainty as that of the Deity, while the abstract nature of either continues to be inscrutable. There may be many causes the nature of which is unknown to us, whose *real existences* are known by their effects. If it is contended that the signs of the existence of material matter are equally a proof of the existence of immaterial matter alone, I shall be able to show that those signs could not be made manifest without the concurrence of both kinds of substance.

The mode of action, or result of the union of material substances with others of an immaterial sort, has been up to this time confounded with the substances themselves; and it is an important point to determine whether these very different sorts of substances do not each possess a real existence. Nor need this inquiry

carry us so far as to determine *the nature* of these different substances; it is only their real existence we wish to point out. There is enough contained in revelation to assure us that both bodily and spiritual substances exist. We do not dispute the existence of many very different kinds of material substances and material bodies. There is no more reason to dispute the existence of many very different kinds of immaterial or spiritual substances and spiritual bodies: for if the natural bodies are thought to be all one kind of substance, it should be inferred alike of those we call spiritual. But both, as created bodies, are made up of the union of the two substances. We believe that God is a spirit, and we believe that the angels have spirits; we believe also that man has a spiritual part united to him which partakes not of the same characters as that of angels. The fact, then, of the separate existence of very different kinds of spirit is propounded in the Scriptures: and I contend that their existence in the operations and appearance of the created universe is deducible from qualities as clearly to be referred to them as to material substance.

I say, then, we can have no idea of the nature of either material or immaterial entities,—that is, of the primordial elements of all created substances of either kind employed in the creation, before those substances were used in creation. These may not be numerous of either kind, and what we call the primary elements of matter, in the language of chemical science, in every probability are not primary in the sense of being un-

divided or unconstituent in their characters. We may nevertheless investigate the *qualities* even of these primordial, and supposed-to-be uncombined constituent elements of creation, as they stand separately related to created natural bodies. And when we do so, and regard them as distinct from that created matter which is the result of the union of the two kinds of substance, material and immaterial, we are struck with the fact that they both possess one quality in common; they are both indivisible in the sense of being able to isolate or retain all their properties, in any one particular portion, these being retained by the most minute portions of either, however infinitesimally thay may be apparently divided. Nor can all or any one of the true properties be removed from the smallest divisible portion. For example, we find this quality of indivisibility is attached alike in this sense to the spirits of heat and electricity as it is to the matter of oxygen and carbon.

It is necessary and important to observe in this place that there is both reason and proof for stating my belief that the primordial and uncombined constituent elements of creation are to be discovered in two different relations and conditions,—viz. uncombined or single, and combined or fixed. In the first state they surround our globe, and, as I shall hereafter show by analogy, all other created worlds in the universe of the one only and true God. In the second state they are to be detected in the analysis of natural and visible created matters, when both kinds may

readily be obtained as in their original and uncombined state, by means of proper instruments. This process is one of the most undoubted physical proofs we possess of the existence of different spiritual entities, as they are united to other kinds of substance in the production of all visible bodies. For when these natural bodies are separated by chemical disunion or analysis, the material part from the immaterial atoms, to which they had by the Creator originally been united, that separation is indicated by the actual disengagement of these spirits, causing the sensible appearance of light, heat, concussion, or report, according to circumstances. Hence we have the true explanation of the phenomenon of the voltaic battery, when, by the chemical decomposition of one metal, by placing it in contact with another metal and an acid, we observe the spirit of electricity, by which and to which it was united in the original synthesis, is separated and makes its escape along the conductor in the form of what is called chemical electricity, in order to blend itself with the uncombined spirit of electricity everywhere in the atmosphere.

The relation the spirit of electricity bears to matter in its combined or its uncombined state may hereafter be shown to observe this difference between the two,—viz. that in the natural creation of visible substances the spirit was mixed up with, and formed an integral part of, created things; and in the production of the qualities of such created things, this intimate and internal commixture of spirit with material

entities was necessary and fixed. But in the production of the ever-varying *phenomena* of natural bodies, the spirits engaged have no longer power to enter the substances, but are confined in their operations to the surfaces of all bodies, with which, however, they do not blend. In the first case, or that of the naturally created substances, the proof of the intimate mixture of these spirits with every known kind of natural substance is given in their perceptible disengagement from those substances when they are submitted to chemical analysis. In the second case, we are led to believe the phenomena of created bodies are caused by the action of these spirits upon the surface of created bodies, from the well-known and established rules laid down by Coulomb, who proved by many experiments that when electricity is accumulated in any body, the whole of it is deposited on the surface, and none penetrates to the interior. The deviation from this rule in the supposed case of the magnetic fluids, which are said to pervade each molecule of the mass, is explicable on the hypothesis that the material substances of the universe do not all bear the same uniform relation to the spirit of electricity, and that some of them are specifically acted upon by this spirit. Such are some compounded bodies of the natural creation, as iron, nickel, cobalt, &c., which have so great an affinity for magnetic electricity that they can never be said to be like non-electric bodies, mere conductors; yet the action of magnetism upon these and other bodies has been shown by Poisson to be equal to a thin stratum covering their surface.

These two very different states in which the spiritual entities are to be discovered in their relation to matter, do not appear to offer a satisfactory explanation of other phenomena besides those I have mentioned. I would instance, not the natural *synthesis* of water, but the *changes* that body undergoes in its transition from ice into steam, which are evidently effected by the operation of the spirits of heat and electricity upon it; and here these spirits being applied to the surface of created matter, the action, so far, seems to resemble those phenomena I have just been defining. But here the resemblance stops, and we have the created body changing its form by altering the position of its constituent particles, in consequence of the application of the spirits of heat and electricity to it. The relation these spirits would appear to bear to the atmosphere is also probably unique; for while the relative proportions of that body have a constant tendency to maintain a fixed standard, it seems impossible to suppose that a standard can be maintained without the co-operation of these spirits in some way. If the atmospheric constituents are not, therefore, chemically combined, it is probable these spirits act upon it in the same manner as if it were a compound created body. And yet a feasible reason seems to be offered why that substance should not be chemically united in its constituents like minerals and other bodies forming part of the matter of this earth; which is, that the elementary materials of the atmosphere being so constantly required to enter into the structures of plants and animals, and to per-

form the daily changes that are going on in different bodies on the surface of the earth, any decomposition of its constituent parts, had they been in a fixed chemical union, would be attended with constant explosion and danger to respiration, caused by the separation in such cases of the material from the immaterial parts, as in the ordinary chemical decomposition of bodies: whereas, the two kinds of entity can now enter the living tissues, whether separately or in the more floating and varying unions, without previous combustion. And moreover they are kept separate in the atmosphere, in order that both the material and the immaterial elements may be ready for use as circumstances arise.

I believe these two very different states, in which we find the spiritual and material entities to exist in their relation to the physical universe, are moreover required to be thus both in a fixed or locked-up state, and in a floating or disunited state, in order to the carrying out of the daily laws necessary to the sustaining of the earth in her relation to all other created bodies, as well as to the carrying on of the celestial forces, and the support and conservation of all other systems of creation.

It will be thus obvious that before the phenomena of light can take place, the material substances and bodies on which the spirits of heat or electricity are to act must have, in the first place, been either created separately, or brought together and united in a fixed manner, as in the original creation. The visible phenomena of light I consider to be caused by the operation

of the uncombined spirits of heat and electricity upon created matter, which is already composed, whether united chemically or not, of the two opposite entities, matter and spirit, as we see them united in the atmosphere. This I have proved in the next chapter, where I give the analysis of a sun-beam, showing in what way the two spirits of heat and electricity enter the ray. The difference between light, conflagration, and combustion, is, that light is produced without the added spirit being so great as to effect a chemical decomposition which is equivalent to combustion; while conflagration results from the relative difference between the degree of spirits applied and the character of the material to which they are applied, the degree being higher, and the character of the material such as is found only when it has been united at some former period in the ternary and quaternary unions caused by the spirit of life.

The natural phenomena thus produced by the action of uncombined spiritual substances upon created matter are therefore to be referred to two different modes of action. The phenomena of one kind are those of light. These, when produced, would appear to be the result of the action of one or two spirits, but mostly of two, either upon fixed or created matter, or else upon matter in its less fixed and more floating and fluctuating condition, as we find it in the air, or as it has been bound up in vegetable and animal structures: while the phenomena of the other kind

are necessarily more mixed, and they proceed from the action of these spirits upon the more fixed and created matter of the earth and the universe. Thus motion, gravity, chemical affinity, electro-magnetism, &c., are forces that cannot be accomplished short of the union of the two spirits of heat and electricity to the solid and fixed matters of the globe, which have already been brought together in such a manner by union with those spirits as to be able to bear the new or second action upon them without altering their component parts.

The intricate action, and possibly the modified action of these co-operating spirits upon the matter of the universe, has excited the interest of all our great natural philosophers, although I am not aware they have detected these regular and systematic unions more closely than as they have been supposed to hold some correlation in the sense of forces one towards the other. They are all susceptible of explanation upon the principle I have now propounded. The wonderful experiments and discoveries of many eminent philosophers bring the strongest conviction to my mind that there are distinct spirits in operation, and that these spirits are conjunctively engaged as second causes in the production of all the great mundane and celestial forces used by the Creator for the conservation of the universe. The experiments of Herschel* on the absorption of

* *On the Absorption of Light by Coloured Media, and on the Colours exhibited by certain Flames,* &c. &c.: published in the Edinburgh Transactions, vol. ix. p. 433.

light, and those of Brewster* on the prismatic rays, prove that colours are caused by the variation in the degree of heat applied to combustible material. "The yellow cone inclosed in the blue envelope" shows that in the production of the ordinary flame of a candle the two spirits of heat and electricity are taking a part. Pouillet has shown that positive electricity is present around the visible part of the flame formed by the combination of oxygen and hydrogen. This is shown by experiments on the sun-beam, presently to be noticed. The discovery of electro-magnetism by Oersted; the researches of Hansteen† on the earth's magnetism and the magnetic poles as regards their position and revolution; and more recently those of Faraday‡ on the nature of the forces here employed, and the identity of these with the phenomena of magnetic electricity,—are so much collective evidence to prove that the spirit of electricity is acting upon particular matter, which spirit this last great philosopher has brought to bear upon that same matter in the production of the rectangular force, and in causing magnetic iron after the discovery of Ampère, and iron-filing, and even a ray of light, to rotate upon it. These are remarkable illustrations to show what these spirits can do. "The calorific effects of magnetic electricity,"

* *Description of the Monochromatic Lamp; with Remarks on the Absorptions of the Prismatic Rays by Coloured Media:* published in the same journal.

† *Untersuchungen über den Magnetismus der Erde.*

‡ *Experimental Researches.*

as shown by Joule; the discovery of thermo-electricity by Seebeck; and those of Daguerre, which have led to the peculiar science of photography,—all prove that the operation of the spirit of heat is in a prominent manner concurrent with that of electricity in the production of the mixed phenomena they point out.

Proximate Principles of Matter.

One of the greatest debts we owe to natural philosophy is for the discovery of the characters, uses, and chemical combinations of those elements supposed to stand alone in the composition of our globe. The study of their modes of action and methods of union, the result of patient observation and experiment, has led to the most profound and extended induction. The advances made in chemical philosophy towards a perfect knowledge of the materials around us, both in their properties and modes of union, have been hitherto most satisfactory. Still, if we take the aggregate of all that has yet been discovered, it must be admitted that our knowledge of what really constitute the simple mediate or elementary principles of matter composing our globe is incomplete; and there is the greatest reason to suppose that, provided we possessed the power, we might yet be able to separate substances which, according to our present knowledge and experimental attainment, are incapable of further division.

In our investigation of some of these mediate principles of matter which chemistry has not further decomposed, and which, on this account, have received the

appellation of elements, we are struck with some three or four of them, such as oxygen, hydrogen, nitrogen, and carbon, on account of the very etherial appearance they assume, and more especially from the very universal part we find they have been made to take in the composition, not only of the inorganic matter which enters into the structure of our globe, but of the water and atmospheric air that surrounds it, and of the living vegetable and animal bodies that subsist upon its surface. These substances are of that attenuate character, and are capable of such minute and almost infinite subdivision, that we find them placed, as it were, in an intermediate position between the more characteristic examples of materiality, and another class of substances with which they have to deal, and which, as these possess none of the qualities or properties of what are commonly called material substances in their elementary forms, I think there is every reason to believe are immaterial in their nature.

Proximate Principles of Matter confounded with the Spirits and their Modes of Action upon Matter.

These immaterial substances are the *spirits causing* light, heat, electricity, magnetism, life, and mind, which have hitherto been confounded with the proximate principles of matter; and, in order to distinguish these expressions from the true immaterial and efficient causes engaged to produce them, I shall use the term *spirit* before these several popular terms, to prevent confusion when alluding to their true immaterial and efficient

causes, and not to their effects; for these terms (light, heat, &c.), as I shall presently show, are the expression of *phenomena* the result of the combined action of the two great entities of creation, materiality and immateriality. They are, therefore, not even expressive of entities of either kind, but are modes of action, and, as such, they cnly express propertics orqualities, and these are unable to begin their existence as real efficient or created causes.

It is most remarkable that, after having created some three or four material substances which natural philosophy informs us are of an uncombined nature, one, two, or more of which, such as oxygen, hydrogen, &c., constitute part of the basis of every created compound of matter, whether organic or inorganic, we find one or two of these immaterial substances were now brought forward by the Great First Cause, and made in like manner to act as universally upon those simple material substances. This co-operation of material and immaterial substances is the only true and philosophical explanation of all the beauty and order, of all the qualities and quantities, of all the extension, consistence, colour, taste, size, feel, &c., in the various objects we behold around us. So that, in our investigations of the component parts of all created bodies, whether organic or inorganic, we have the most palpable material proof that the same Being who made any one of the material substances around us,—such as oxygen, hydrogen, nitrogen, or carbon,—must have made all of them; for their ultimate analysis will furnish us with some one or other of the same elementary substances,

differing only in relative quantity; while the same fact applies also to the *immaterial substances* I have alluded to, for the three *spirits* causing the phenomena of light, heat, electricity, magnetism, life, and mind, which we found to be indispensable spirits employed by the Creator in the synthetical arrangement and construction, or the analysis and reconstruction of material bodies. And the proof we derive from the philosophical, investigation or analysis of the substantive world around us is most convincing that these spirits do exist; for we may now assure ourselves both of the universal nature of the common material elements of our globe, as well as the living creatures that inhabit it, and of the invariable phenomena resulting from the conjunction of those material elements with others of an immaterial nature, by which they exhibit unalterable properties according to some fixed decree bestowed on them by their Creator.

There is, therefore, nothing in the discoveries of natural science conflicting to the doctrine that there are existing and created immaterial substances, as well as material substances, in the works of creation; and there is great reason to suppose philosophy has been too isolate in her views of immateriality; she not having entertained fairly and impartially the possibility that there are several kinds and degrees of immaterial substances or spirits which, like the proximate principles of material matter, are incapable of decomposition or further division into *different* parts, because they are not com-

pounded, although they may possess very different degrees and kinds of power nevertheless.

I am quite aware the problem has not as yet been solved, whether these imponderable substances, as they are called, are material matters in their most minute subdivision, or whether they are "*manifestations of activity*," or modes of action of material matter alone. But from the argument I have already adduced, and the proofs I am about to give, I do think that such substances have an independent immaterial existence, which may be logically proved, and that it is their application and adaptation to the material substances of the globe in the two ways I have stated, that constitute all the qualities and all the phenomena we behold in the matter that surrounds us.

The Universal Materiality and the Universal Immateriality of all Things shown to be alike incorrect.

When philosophers have attempted, by the unassisted aid of rational or natural philosophy alone, to penetrate the nature or dive into the cause of the two remarkably distinct substances I have endeavoured to show have a real existence in the universe as distinct entities alike under the control of an infinite Being, they have fallen into one or other of these two errors,—first, either they have confused the true efficient causes of the manifest and outward existence of material substances, by making those causes inherent in the matters themselves, thereby denying entirely the existence of immateriality and the

operation of spiritual causes in the universe as entities, whether united to or disunited from material substances; or, secondly, they have endeavoured to prove that what is commonly termed and received as material substance is nothing more than an aggregation of qualities, which, inasmuch as they are formed within the mind, have no other than an immaterial, though at the same time a real, existence.

We have thus the advocates of two very distinct and conflicting theories—viz. those who contend for the materiality and those who contend for the immateriality of the universe; and, if the views I now put forth have any claim to be regarded as truth, it can no longer be disputed that though the doctrine of universal materiality or that of universal immateriality may have been urged with undoubted ability and with apparent conformity to syllogistical or to mathematical rules, yet each of them is amenable to refutation, and therefore equally unworthy of belief.

When I speak of the existence of *uncombined* material substance, or of material substance, as it is seen combined in the visible created world, as a real entity, and treat it as an indisputable fact, I do not make the truth of that fact to rest upon certain and undoubted effects, but I take up my stand on the verity of revelation, which assures me of this fact at once; for there I ascertain that it formed part of the original creation*

* Gen. i. 1; Psa. xc. 2; Prov. viii. 23, 26; Jer. x. 12, xxviii. 5; Heb. i. 2, xi. 3, &c.

by the word of God. I think, however, with this fact to guide us, its distinct identity from immaterial substance may be most unequivocally proved by philosophy. It has been said that there is no proof to be drawn from philosophy of the real existence of material substance, so that those who disbelieve in revelation are strengthened in the idea by the plausible evidence adduced to show that all we behold in the outward world is comprehended within the mind, and in a material sense cannot be without it. Thus the colour, size, shape, and consistence of material substances are regarded by some as the mere qualities of those substances, but, when taken away from them, are thought to leave nothing behind. Qualities they are, but they have nothing to show they have any entity of existence at all, either material or immaterial.

Having received the first announcement from revelation of the real existence of material substance as a distinct act of creation, I will now go on to prove the rational probability—nay, the certainty, of this by the following incontrovertible fact.

We find the different qualities and characters of the visible and created bodies around us are regulated by certain fixed and accurately adjusted laws, as they are commonly termed; which laws are really the action of immaterial substances upon those that are material. If the material substance did not exist apart, that is, distinct in its nature from these immaterial substances, how could we behold them by means of our senses? for there is no evidence that immaterial substances are

patent to our senses, except as they have been used by the Creator to give form, colour, consistence, &c., to the proximate principles of material substance; nor could this form, colour, &c. be made manifest to our organs of sense unless it was through some spirit, combined with, and superadded to, a material substance on which it could act. The immateriality producing light and heat is necessarily latent, and totally incapable of being recognized by sensations conveyed through the nervous system of animals, unless they meet there with material substance through which, and upon which, they can manifest themselves; and not till then do they produce effects according to the degree in which they are applied, or rather to the nature of the material substance they come in contact with. The great proof that they do come in contact with substances which are different in nature to their own is, that they have power, not only as efficient causes, to regulate and preserve all the material substances, whether in a combined or an uncombined state, of which the universe is composed, but also to break down and decompose those combined substances into their primary elements. But here I contend they stop; and their power to act upon and dissolve those primary elements of uncombined materiality any further is ineffectual; indeed, it is impossible. They may dissipate them by repulsion, or by conflagration, or by the most minute dissemination; but there is no evidence that they are destroyed, in the ultimate sense of the word, as by annihilation. And

this is to be inferred by the most powerful analogical deductions. If, for example, the destructive conflagration of hydrogen or carbon implies their total annihilation, or even so much as their dissipation beyond the atmosphere that surrounds our earth implied their total annihilation, our globe must rapidly and sensibly diminish in size, and could, on that account, no longer maintain the accurate and uniform relation we know it does to the sun and moon, and other bodies comprising the same system. The consequence of a total annihilation of the materiality of our globe, and, by a parity of reasoning, of others also, or even their dissipation beyond the radius of the atmospheres that surround them, would be attended with no less than a constantly varying action of those laws in nature which we have the fullest assurance, by long experience, and the most extended observation, are invariable. Now, if light were a material substance, as the Newtonian theory must make it to be, the incessant torrents of light which the sun is perpetually supposed to be sending forth must either diminish its size, which would at once destroy the uniformity in the movements and laws of the planetary and other bodies within the solar system, or else the material parts are continually undergoing re-creation,—an idea inconsistent with the science and revelation of facts.

The real existence, therefore, of materiality as a distinct entity is pledged, not in the sense of a variation in its relative quantity, but in that of its having, in the

case of our earth and other created orbs, a distinctly fixed totality, on which depends the regularity of their motions, and the accurate computation of time.

It might be urged, though most unphilosophically, and without any authority either from nature or revelation, that the Creator is continually re-creating fresh supplies of the primary elements of material substance: but this argument, while it cannot fail to admit the separate nature of the material entity, is as much as to say the uniformity in the laws and collocations of created matter, which proceed from the conjunction of previously uncombined substance with the spirits of immateriality, is not according to an invariable and divine appointment, but to some supervenient laws, or to the accidental phenomena of vicarious action; an idea which is continually contradicted by the whole course of Nature's undeviating laws.

The method pursued by natural philosophy to ascertain with certainty the real existence, as well as the constituent elements, of some of the simpler inorganic bodies, is most satisfactory. She determines their composition, first by analysis, and then by synthesis. By the first method their primary elements are separated. And if we inquire by what instrumentality this separation is accomplished, the answer is, by the immaterial efficient causes of heat, or of electricity. Thus, by that of heat, we may separate many of the constituent elements of which inorganic bodies are composed; but we cannot, by this efficient cause alone, resolve every inorganic body into its primary elements. Neither

has it been found that, with the additional concurrence of the efficient cause of electricity, we can, in every instance, succeed in disjoining all the primary elements of which some bodies are composed. But we may take for example a drop of water; and by the application of galvanic electricity we may analyse it into its primary elements of oxygen and hydrogen. And that we may be re-assured of the correctness of the result of our analysis, we are permitted, in this instance, to reverse our methods of proof of the reality of its composition: and this we may do by the synthetic process. To effect this, we take the constituent elementary materials of water, oxygen, and hydrogen, and by bringing these in contact with the spirit of electricity, attracted for the purpose by the ordinary electric battery, the result is the production of the natural substance we call water. If this substance were strictly and simply a binary compound of oxygen and hydrogen, the mere bringing these materials together in the proportions they go to form water would only be required. But these material substances cannot enter into chemical union without the co-operation of a third substance, and that an immaterial one. The difference between the first process of forming water, and that of causing that water to become vapour, is just the difference in the mode of application of the spirit of electricity. Water is a naturally-created body; and as such must have had the electric spirit mixed up with the materials oxygen and hydrogen: but when thus formed into water, and in this position fixed as a created body, its

further change into vapour is effected simply by surrounding its *surfaces* with the spirits of electricity and heat.

The complete immaterialist will argue that if we take colour, shape, size, weight, extension, and a few other qualities, from all material bodies, there is nothing of them left; and therefore they agree with Berkeley and his followers, that, though these qualities have a real existence, yet the whole materials of the outward world are nevertheless immaterial in their nature. The advocates for universal immateriality do not dispute the possibility of the existence of materiality in the universe, but they contend it is not self-evident. This is a truth applicable to both materiality and immateriality. They are like the great God that formed them, and rules over them,—in themselves they are invisible and incapable of investigation. They are neither of them as separate entities and in an independent state,—that is to say, without the help and concurrence of each other, self-evident; and therefore, in this assertion, these advocates at once show they have wrongly apprehended the qualities and characters of the substance they so universally contend for; for we certainly have no experience to guide, or authority to support, the idea that shape, or colour, or consistence, are real entities, any more than modes of action are modes of being: and I question if any one of the apprehended self-evident proofs of the existence of immateriality, as a separate and distinct entity, would serve the purpose, as incontrovertible evidence of immateriality, so well as

they would that of materiality, especially in the common acceptation: for we are certain that all the bodies we behold with our senses, and which we term material in common parlance, have ever been identified with certain characters which philosophers have called primary and secondary qualities of matter; yet no one could ever contend that these qualities were real entities, but those who were ignorant of the true efficient causes of them.

Now, however ignorant we may be of the precise nature or cause of entity beyond the fact of knowing by whom they were first made, in which fact revelation has instructed us, we are certain from ample experience that it exists, and moreover must be capable of producing effects. But we have no experience to assure us that effects, even, could be manifested or produced by uncombined entity; that is, by an entity which wholly and solely partakes of the nature either of materiality or of immateriality, and that has no conjunctive operation the one with the other.

Again: Modes of action cannot begin their existence, and in this state they cannot produce effects, for they are themselves but phenomena; and phenomena are not efficient causes. It is said, that the qualities of bodies being removed, there is nothing left in such bodies. This is a safe observation, and no doubt ventured upon the invariable nature of created things, for to remove a cause, in the sense of its complete annihilation, shall always be interpreted to mean the removal of the effects resulting from that cause. And here the light of revelation breaks

in: for to believe that qualities only exist around us, is not only to believe that effects can exist independently of causes, which is a philosophical absurdity, but it is to believe that we are misguided by revelation on this point. For we are most plainly and unmistakeably told there, that there was a time when matter was "without form and void,"—void of what? Of the other qualities that afterwards adorned it. Still it was matter, before it manifested or received those qualities by which it was afterwards identified, or in other words before it was acted upon by the spirits of immateriality.

Thus the goodness of God, that "so clothes the grass of the field" that on every side it bears the impress of divine workmanship, is by some reduced to an optical illusion; and the whole fabric of the globe is so loaded as it were, and covered on every side, with surpassing wonder and beauty, that the very materials on which these beauties have so long been displayed are confounded, not only with their efficient causes, but by many with the great first cause; a powerful argument to shew that, without the aid of revelation—the chart and a compass of the only true philosophy—we should not only lose our track and so fail to reach the haven, but we should sink, and that deeper and deeper, into a fathomless abyss of darkness and doubt.

Had the immaterialist admitted that the *substances employed to produce* the colour, shape, consistence, extension, &c. of material bodies were immaterial in their nature, they would have cleared away the difficulty that surrounds the doctrine of immaterialism; and while they took credit for the extent to which the immaterial prin-

ciples of light, heat, and electricity, were fairly entitled to go, as immaterial substances acting upon matter, they would acknowledge that something in its nature and characters, diametrically opposite to immateriality, was also necessary in order to the manifestation or proof of the existence of both. We could not, for example, recognise light without an atmosphere, nor heat without some material body in which it may be developed, nor electricity without a vehicle, nor life without an organised body. Light is not an entity, nor is it a mode of action even of material matter alone, but it is a mode of action of immaterial upon material matter.

Neither, then, can the existence of immaterial nor of material substances be proved in the first instance by the unassisted aid of philosophy, whether natural or mental; and the same argument we draw from revelation to prove the real existence of immaterial spirits and an immaterial world, is equally available and necessary to prove the real existence of material bodies and a material world.

The power of the immaterial substances causing light, heat, electricity, &c. over material bodies, great as it is, still has its limits, and while we know nothing, but as a matter of faith, of the true cause of these substances, neither do we know any more of the cause of the ultimate element of matter.

By that spirit that produces heat we may decompose almost if not all compounded bodies, and reduce them to their ultimate elements, oxygen, hydrogen, nitrogen, and carbon, which are all the gaseous elements we are acquainted with, or we may reduce them to their earthy

alkaline or metallic bases; but further than this decomposition and analysis we cannot go; and here, therefore, material substance takes up its stand, and as it were defies the immaterial spirits to annihilate them.

I can believe, therefore, rationally, in the existence both of an immaterial and of a material world around me; and bringing revelation to my aid, I can see nothing but the most complete evidence to be deduced from thence of the separate and opposite existence of these two grand classes of substances.

It will be seen, then, that those phenomena of created bodies which have hitherto been so unphilosophically called imponderable agents, have really no existence as entities of either kind of substance material or immaterial; still less are they likely to exist as created bodies or created matter. Neither have they any analogical resemblance to them, but they are really results of the action of spirit upon matter; and doubtless the theory of atoms, as applied to such phenomena, will soon give place to a more extended theory of immaterial agents. The time is not far distant when we shall no longer think it possible that any bodies as we behold them with our outward and inward senses, whether those bodies are organic or inorganic, can be brought together, regulated, altered or controlled, without the agency of powers as truly spiritual as those we have so long regarded as exclusively to govern organised bodies.

Important part taken by the Spirits.

If the immaterial efficient causes of those phenomena which natural philosophers have termed imponderable

bodies, have any real existence as entities of *material* matter, it is indeed singular and paradoxical that they should possess such remarkable power over bodies of like nature with themselves; for it must be remembered they are the active efficient cause of all the varieties in the shapes, colours, and other qualities of every visible substance, and when applied as uncombined spirit to created matter they constitute the laws which govern our earth. Indeed, the whole range of physical and inductive science is but the demonstration of their mode of action when united to materiality. I do not expect there is any difficulty in proving that the spiritual substances I have alluded to are made to take an indispensable position, and to act an important part in the formation of every visible substance. Thus, the spirit of heat being engaged to regulate the consistence of elementary materials, it may doubtless be proved that in many instances their chemical union with materials of like nature is accomplished by the spirit of electricity. It is also highly probable that the natural separation of the old materials into their primary elements is the act of electric power. The strongest artificial means we possess for accumulating or attracting these spiritual substances in those bodies most favourable to their reception, have not as yet enabled us even to analyze correctly many of the natural inorganic bodies around us. And with such potential tenacity do some of the most minute portions of the gaseous elements—oxygen, hydrogen, &c., appear to be united to some inorganic substances, that we cannot detach or expel them by the help of our strongest batteries. For this

cause we are unable to follow nature in the synthesis even of inorganic bodies.

The doctrine of Imponderable Agents shewn to be erroneous.

There is a class of philosophers,—and when I mention such names as Aristotle, Newton, Bacon, Laplace, and Locke, it is impossible I can do so without expressing the very high veneration in which I hold their transcendant talents,—whose views in philosophy appear to take a middle course between the two more unequivocal advocates for universal materiality or immateriality. The lofty talents of these individuals have enabled them to establish their tenets, and to put forth their claims upon public belief on so wide a basis of physical and mathematical induction, their views have become so popular, and they are so bound up in the exposition of natural science, that it seems almost an arrogance on my part to venture to disturb such gigantic and cumulative labour, wrought out as it has been with so much care and experiment.

Much of this laborious work, however, is to be explained upon a plan of mental operation that partakes of the character of a mechanism which, though in all its relations it may be mechanically correct, disturbs not the fact of the manner in which that mechanism is applied. The universal and immutable method by which the phenomena of creation are governed, gives to the astronomer and mathematician a power of accurate computation, which strikes the mind

instantly with the idea that if any knowledge is certain it is that which conforms itself to the most rigorous application of geometrical and scientific rules, which, by resting on a sure induction, can never be refuted. All this is, after all, but the elaborate mental machinery by which the fabric of science is put in motion; and it is in one sense independent of the substances employed, or the manner in which those substances are brought to bear upon each other. It is not disputed there can be error in this machinery; the probability is, it is complete, and not subject to variance, for it is established upon the unfailing uniformity and the invariable laws of nature, stamped with the signet of the King of kings—the unchangeable Creator; and in surveying this machinery the mind of a master is surely needed to unfold so great and so divine a work. But it is the *supposed material* submitted to the mind for investigation, which does not bear to be so regarded; and there is reason to think it has been mistaken for what it is not. Sufficient argument may be adduced from nature to show that this supposed material will not bear, however etherial a substance it might be thought to be, that test it ought to stand as a proof that it is created matter.

Some of these writers, in speaking of light, heat, or electricity, as agents or efficient causes in the hands of the Supreme Cause, appear to offer a doubtful argument, not as to the *modus operandi*, but as to the character of these supposed causes; for they have not failed, in the course of that argument, to show that they

believe such agents to partake of the nature of material bodies *entirely*, although they call them at the same time imponderable.

To say that light, heat, and electricity, are imponderable bodies, is not only negative and indefinite, but, strictly speaking, it is not sense, if material bodies are intended to be expressed by this term; and we know of no other to which the term can be applied. There is no material body that is actually imponderable; and when any such matter can be shown to be deficient in this quality, it is no longer material to common sense, neither is it so in a true philosophical sense: for the weight of a body is the amount of attraction the immaterial spirit of electricity exercises on that particular body as a created body; and this must be more or less existing, or the body could not be retained on the surface or in the atmosphere of our earth. For this cause it is that spirit cannot be retained or confined to the earth, or to any particular part of space; and therefore all material substance, whether uncombined or united with spirit, as in the visible creation, has this quality of ponderosity given to it. Those that are uncombined —such as oxygen, hydrogen, &c.—have less weight, as they possess fewer qualities than combined created material substances, which are, as a consequence, more ponderous. We can, however, detect no such quality as this in identifying spiritual substances. It is by no means satisfactory or conclusive to say the weight of a body is too small to be detected by the finest balance; for this might be urged in the case of material matter

that is too small to be collected in sufficient quantity, but of light and heat, any reasonable amount of which, whether natural or artificially condensed, may be submitted to this test; yet it yields no weight. The same weight of iron, made red or white-hot, is no heavier than the same weight of cold iron. The same weight of ice is no heavier when converted to water. The focus of light, when brought to bear upon the finest balance, will have no more effect upon it, in a ponderable sense, than the light that surrounds it.

That circumstance that appears to have contributed most towards the maintenance of errors the most irreconcilable in philosophy, is the confounding of those qualities and phenomena which are truly the result of the union of material with immaterial substances, with ideas and arguments to prove their exclusive material entity. Thus the materialist contends for the materiality of the phenomena of light, heat, and electricity, &c.: and it is thought very generally by philosophers that light, for example, is in its nature material, because, when given out by luminous bodies, a certain measure of time, however short, is required for its transit. It is, however, to be determined whether this apparent fact is not capable of receiving an interpretation that does not disturb the immateriality of the efficient cause of light. It has been already stated that light is the result or mode of action of immaterial spirit upon material created matter; and its manifestation is only to be detected when these two opposite kinds of substances are intact, and even then it may—and, judging

from experiment, we may say it does—require the combined aid of the immaterial cause of electricity, as well as heat, as it does the combination of two or more material elements, in order to its development. Of these unions of the spiritual entitics in the production of the visible phenomenon of light, heat, &c., I shall speak more fully in the next chapter. To say that light, therefore, is material, because it requires time for its transit, only proves that the palpable effect of its immaterial cause is governed by the material substance to which it is related. And nothing is so delusive to our senses as the action of the immaterial substances, causing light, as they operate upon different bodies we call luminous.

We have this most remarkably exemplified in our firmament upon a clear night. The unscientific observer, in viewing the heavens with his naked eye, is inclined to think that, if it were possible for him to count the multitude of visible stars before him, they would number millions; yet, it is well known, two thousand, at the outside, is the number he could count, under such circumstances, over the entire circle of the heavens. Not that I have, by stating this well-known fact, any desire to limit the number of created orbs; for, in one hour, by means of a telescope, almost countless thousands may be seen to pass through the field of vision. I am only anxious to prove that, however desirous we may be to bring the *created* universe within the brackets of time and space, we must fail, from our total inability to measure the more distant objects of

creation by the same rule we measure those which stand in a more proximate relation to our own globe.

Allied to this optical illusion of the visible stars to the naked eye, is that of beholding two, three, four, and even seven suns, which, it is well known, is occasioned by the refraction and reflection of light during a very condensed state of the atmosphere. And this latter circumstance is one, amongst others, which explains the varieties in the size of objects under different states of the atmosphere. It is well known that this refractive power of the *atmosphere*, as it is thought, prevents any distant object being seen in its true position. And whether that refraction depends upon the true atmospheric materials being altered by pressure, according to their proximity or distance from the earth, or upon those materials composing water, which are there elevated and expanded by the operation of the spirits of heat and electricity, remains to be proved. But it has been shown that refraction varies at the same distances from the zenith, in proportion to the height of the barometer: which is as much as to say, according to the quantity and quality of the materials involved, by the spirits of heat and electricity, in the atmosphere.

It is said that the humidity of the air produces no sensible effect upon its refractive power. This is doubtless proved by accurate experiment, and may be explained to mean that the refractive power of the atmospheric constituents nearest to the earth's surface are exactly equal to the refraction caused by humidity in the atmosphere, when the water and the atmosphere

are placed side by side, in virtue of their equal specific gravity. But we must take our experiments from the higher regions of the atmosphere, before we can tell the truth whether water, in a still more gaseous form, does not there alter the action of light in its refracting power. And when we add to this the difference of latitude, the difficulty does not seem to be lessened in making calculations of distances through this medium.

The consecutive Operation of the Immaterial Spirits in the Works of Creation.

It is most strikingly remarkable that, at the very opening of revelation, it should be stated that in the beginning, when God created the earth, it was "without form and void, and darkness was upon the face of the deep," *till* the spirit of God moved upon the waters. *After* this event, God said, "Let there be light." He divided the waters from above, and from under the firmament, gathering the latter together to form the solid ground. All this he did by his Spirit causing the great immaterial causes of heat and light, electricity and magnetism, to act upon material substance which previously was void and shapeless, uncombined, and probably in a gaseous state, but which he had created distinct from the immaterial substances.

We must not lose sight of the fact I have already stated, of these great immaterial substances having been in the first instance, like the material elements, brought into existence at some previous time before they were employed by the Creator in the original formation of

the earth, when it received its first shape, order, and beauty at His hands. And, I would add, is it possible that mere bodies, alike in nature to the chaos that was acted upon, were the only instruments of this wonderful creation? And when the living bodies were created, it was not before God had, by the agency of the immaterial substances, prepared the way, when, by their instrumentality, to which he added others possessed of a still superior and controlling power, he made, first the vegetable, and; through this, lastly the animal world.

The phenomena of life could no more be carried on independently of the spiritual substances causing light, heat, electricity, and magnetism, than they could without food or air. M. Pouilla satisfactorily showed that electricity was developed during the vegetation of plants; and this was confirmed by the experiments of Mr. Pine, of Maidstone. In M. Pouilla's experiments the electricity manifested itself the moment the germ was above the ground. And Bellingeri's experiments show, that while positive electricity is clearly present in many fluids of the living body, it was yet in more abundance in the blood. It is by no means improbable, as I shall presently show, that the round appearance of the blood-globules owes itself to the fact of their being surrounded by this spirit. The manner in which the spirit of heat acts upon living bodies is too well known to need any detailed proofs in this place that its operation is indispensable to the building up and sustaining of the organic structures.

And if we argue from analogy drawn from the more highly organized living bodies, we can no more regard these spiritual substances of the immaterial world as identical either in character or in power, than we can the proximate principles of ulterior matter. They are doubtless possessed of varied and graduated degrees of power, and all bear a remarkably distinct relation, according to the highest known mathematical laws, to the different substances of materiality; but it is a relation *sui generis*. There is also the greatest reason to believe that these immaterial substances themselves are subservient to each other under particular circumstances; and hence we observe their effects, when united to materiality, are apparently graduated, so that we find, under particular circumstances, gravity yielding to chemical attraction, chemical attraction yielding to heat, heat yielding to light, light to electricity, electricity to magnetism, magnetism to life, and so on, till we may trace all power up to its Divine source. Some of these phenomena are doubtless the result of what I have termed simple causes, while others partake of a more compounded and complicated character. All of them, nevertheless, may thus be in subjection to each other, either in the order I have given, or in some other; and under particular circumstances they doubtless are possessed of graduated degrees of power, bearing a relation to each other in a restricted and definite sense. And it is certain one or two of them may be produced by one and the same spirit, though modified in their action by the kind of materiality with which they come in contact.

Difficulty of reconciling Natural Phenomena by the Old Theories, and the Reasonableness of the Doctrine of Distinct Spirits.

The more science advances, the more embarrassed does it become in the attempt to reconcile it to the doctrine of imponderable materiality. How much difficulty meets us in our endeavours to expound either of the prevailing theories of light, whether corpuscular or undulatory! We cannot rationally believe that a material body, however infinitesimally attenuate it may be, can travel through a space of many millions of miles within a compass of time too small to be detected by our finest chronometers. Herschel computes that light is upwards of two millions of years travelling from the nebulous stars to the eye of the observer on our planet. Such ideas as these are inconsistent with, and quite unworthy of, natural philosophy; for they cannot be subjected to reason, and there is certainly no authority for them in the philosophy of revelation; so that, even if mathematically deduced, they are altogether adventitious and conjectural.

But why should they be entertained? The idea that every created orb in the celestial universe is governed by time and space, and is, in obedience to these, subject not only to general laws, but also to laws that particularly relate to them as individual or even as systemic spheres, is not warranted, unless we can prove the collocations of materiality throughout the universe are identical; and this we cannot do. Whereas, supposing these spirits to be present everywhere, if not in

some sort of combined or visible form, certainly in an uncombined state, we have no further occasion for such calculations. Doubtless the whole expanse of the universe is unbounded by any time or limits; and this seems thrust upon our minds by every telescopic discovery the ingenuity of man has produced up to the latest period. The further we can carry our artificial vision into the depth of space, the more wonderful and incalculable does the universe appear to present itself to us; and, therefore, no instruments and no machinery which calculate the relative distances that separate, or the time that is necessary to revolve the bodies contained in it, can be considered to bear any correct relation to the truth. "We sink," says an able writer, "under the labour of endeavouring to conceive an immensity so astonishing. We shrink from the result of our calculations as if they were inaccurate. But, admitting the existence of inaccuracy in its greatest possible scope, how little does it rescind from the infinity that remains! We are lost in our own nothingness amidst the splendour that envelopes us." Nor can the intellectual mind supply us with any physical or mathematical conception or calculation of that universe which contains all God's created worlds, together with their furniture and living denizens. It is only by the help of our moral faculties, aided by an express revelation from the infinite Being by whom these worlds were made, that we can in *thought* form some general but faint idea of what infinity must be in relation to time and space. We are condescendingly permitted to mark

the glorious galaxy of created things that are within reach of our finite senses. But in the higher and more eternal manifestations of God's glory these must be removed before we are able "to see even as we are seen." It would not enlarge my ideas of the infinite Being who created this earth, were I to be assured, hypothetically speaking, that every moment of time up to the present from that event had been employed in creating one of similar or of larger dimensions; for all this would be still the exercise of miraculous power within the brackets of time, and my ideas of infinity obtained from revelation must still reach beyond this. How gratuitous, therefore, must it be to draw an argument of grandeur in the Divine architecture of the heavens, by multiplying worlds in the depths of unfathomable space we cannot prove to exist, and which, even if we could, bring us short of the estimate we receive from revelation!

I can conceive nothing grander than that the whole creation, inorganic as well as organic, subject to the overruling power of the Creator, owes its existence, support, characters, and phenomena, to the operation of these immaterial spirits, the intimate connection, mutual dependence, and universal application of which identify them as the subordinate agents of the One Great First Cause, and as emanations of the same triune Jehovah, by whom "all things were *created that are in heaven* and that are in earth, visible and invisible, whether they be thrones or dominions, or principalities or powers," who, when He said "Let there be light,"

said also "Let the earth bring forth the herb yielding seed, and the living creature after his kind," and "let us make man." The agency employed by this Almighty Being that sustains inorganic bodies, therefore,—that gives them characters, and qualities, and powers of their own,—is the same which we trace up into the delicate and sensitive organization of vegetable life, the more exquisite perfection of animal bodies, and the most elaborate concentration of Divine skill in the formation of man.

The same immaterial substances are identified as alike engaged in the production of the qualities as well as the phenomena displayed in every visible thing; and that circumstance which would appear to mark the distinction of one class of bodies from another, such as the animate from the inanimate, gives the superiority to those bodies which manifest a capacity to receive or treat with the greater number of these spirits: hence we have inorganic bodies treating with those spirits which cause light, heat, electricity, &c., and that in different degrees; and we have organic bodies treating not only with these, but with still higher spirits—viz. those of life, of man, and of angels, which produce the phenomena and powers of those beings they animate.

CHAPTER III.

THE RATIONAL AND PHYSICAL PROOF OF THE REAL EXISTENCE OF MATERIAL AND IMMATERIAL SUBSTANCES RENDERED CERTAIN BY THE INVESTIGATION OF THE QUALITIES THESE UNITED SUBSTANCES PRODUCE, AND THE GENERAL PHENOMENA CONSEQUENT UPON THEM.

It has already been stated and proved that there is no positive means of ascertaining the real nature of the primary material elements of matter; and the same observation is applicable to the primary immaterial elements of matter. We know nothing of the abstract nature of either; so that we are totally ignorant of the primary cause, either of the one or of the other, beyond what we learn from revelation, that they both proceed out from God, who is their Great First Cause. We are nevertheless most certainly assured of their existence, both from this source and also from certain known effects that may be clearly traced to them. We are assured, also, that a wide difference characterizes these two kinds of entity,—a difference we deduce from the very wonderful qualities and phenomena their combined influence produces. It is not difficult to detect these qualities, for they are distinguishable from the uncombined spirits and material substances, as well as

from the union these two kinds of entity form in the natural creation.

The different Qualities defined and distinguished from Modes of Action, by which a new Theory of Light is given.

The qualities of uncombined materiality are specific ponderosity and indivisibility. This ponderosity is independent of the magnetic influence.

The qualities of uncombined immateriality are indivisibility and omnipresence, as far as regards the created universe.

These two entities blend their powers in created union, in order to produce those qualities we observe in the natural bodies around us; and, thus formed, they present a surface for the operation of the same spirits again upon them in their new form. These operations I term phenomena or modes of action; and such are light, heat, and electricity. When these phenomena take place, it is then implied that, first of all, the two entities are united, as in creation; and, when so united, the uncombined spirits are brought to bear upon their different surfaces.

The shape, colour, consistence, divisibility, &c. of created bodies are permanent, and may be called the *passive* results, or qualities resulting from the simple union of the two entities; while light, heat, electricity, &c. may be called the *active* results, or phenomena proceeding out of the operation of the uncombined spirits upon created matter.

To illustrate this more fully by an example: What I would define to be the active results of the application of the uncombined spirits to created matter, is that state of things which is present to the senses so long as the causes producing them are operating or are intact. Thus, combustion is the result of the spirit of heat when applied to created matter in which are embodied the primary elements of carbon, hydrogen, oxygen, and nitrogen, as we see them united in the vegetable and animal structures; so that these created bodies are resolved into their primary elements. Light is a phenomenon similarly explained, but differing in the degree of uncombined spirits on the one hand, and the nature of the created matter on the other. These *active* results, which pass away with the removal of the cause producing them, should not be confounded with those durable qualities of all bodies, colour, shape, &c., I have termed passive, and which continue to manifest these qualities under all circumstances, where the particles of the body are not relatively altered either by mechanical or chemical agency. Thus, if I put the leaves and flower of the *nymphæa alba* (*white water-lily*) and the *tradescantia virginica* (*common spider-wort*), both together under the air-pump *in vacuo*, by which I remove them from the temporary contact of the uncombined entities, no alteration will take place in the colour or shape of the several leaves and flowers; but the blue will continue blue, the white white, and the green green, because these colours are here formed permanently by the bringing together of the two entities in

constituting them created bodies: and until those created bodies, whether organic or inorganic, are broken up by decomposition, their colours will remain independently of the uncombined entity, whether material or immaterial, with which they may or may not be in contact: but the *active phenomena* have need that these uncombined entities be present, to develope them; and, therefore, when they are withdrawn, they cease. Of such a character is light. The efficient causes of light do not produce a luminous appearance till they come in contact with material created matter. Those efficient causes, we clearly know, have a distinct entity of existence, by the identical effects produced by them upon created matter. They should therefore be distinguished from light, or their combined effect, by a suitable name, as *caloric* has been partly separated by chemists from heat, which is the result of the union of the spirit of heat with material substance. Chemists acknowledge this caloric to be latent or imperceptible under certain conditions of matter, but they do not appear to have regarded it even in this position as a spiritual substance. Dr. Henry speaks of non-luminous caloric, as it has been called, or, as I call it, the immaterial spirit of heat. There can be no meaning in the term invisible light or latent heat; for light is not light unless it is visible, nor is heat heat unless it can be felt by the senses, and that implies the application of the two different entities in the first instance. Neither the *qualities* nor the *phenomena*, then, which belong to material or to spiritual entities, or to the two in con-

junction, are capable of detection without the assistance of each other: and this serves in a remarkable manner to show, without disturbing the nature of the entities, that such qualities as colour, shape, size, consistence, &c., and such phenomena as light, heat, electricity, and life, are compound in their character, and indebted to both entities for their manifestation. And I would particularly point out the mixed and composite character of those qualities we observe in created bodies. Let us take for example that of divisibility. This is a quality that is thought to owe itself *entirely* to material matter. But it is not so; for, as I have before remarked, true divisibility is not a quality of either entity in their separate state, but is a compound effect of the two entities, material and immaterial. This is clear from the fact that the power to be divided could not exist if the original coming together of the material part, which is quite independent of its special weight, had not been effected by the agency of the spirit of electricity causing an attraction of the particles. We know that oxygen, for instance, like any other uncombined material substance, can be divided into any number of parts or molecules; and this may appear to argue its true divisibility. Yet in every molecule thus divided we observe the same qualities which characterise the whole mass are retained. This property of retaining all the qualities of the entire mass in every individual separated molecule owes itself to the indivisibility of both kinds of entity in their separate state, while unitedly they form created matter which is divisible. Material as well as imma-

terial substances, therefore, in their primordial state, strictly speaking admit of no divisibility; and however natural bodies may appear to be separated by disjunction of their parts, yet this quality is truly a quality of the *created* matter, as it were, first united by God.

When the spirits are brought to act alone upon created matter, as in the production of natural phenomena, the quality of *indivisibility* is very clearly to be detected as marking the presence of uncombined spirit in the accomplishment of the phenomenon. This is familiarly shewn in the phenomena of what is called magnetic electricity. Iron has, as a natural created body, a great affinity for the spirit of electricity; so that, being charged with this immaterial substance, by means of the natural leading stone, or by being placed in a particular position in relation to the magnetic axis, it possesses a north and a south pole, which exhibit qualities known as polar attraction. If now this loadstone is broken into halves or thirds, or any number of portions, each part will be found to possess the same qualities entire which the iron had collectively before it was divided.

We may thus trace in the qualities as well as the phenomena of natural bodies, a mixture of effects apparently resulting from very different causes opposed to each other; yet, when united, they form the mixed qualities and modes of action of sensible bodies, of which, divisibility as one quality, and magnetism as one mode of action, may be instanced.

But in contemplating the higher immaterial sub-

stances as we behold them in living bodies, we shall find this power of divisibility becomes gradually more circumscribed, so that in the case of the higher animals it becomes impossible. And here it should be particularly noticed, that it is not the immaterial or the material entity of these highly wrought organic structures which interferes with this free division, but the character of the created bodies themseves, and the particular circumstances attached to them as *individuals*, having each their distinct identities; a fact first made known to us in revelation, as I have already shewn in the introductory chapter. And these individuals have no power to communicate these qualtities in divided portions.

Now, the *spirit* of light has really no property of divisibility. In its latent state, or, to speak more plainly, in the state in which it is disconnected with material substance, there is no proof that it is confined to space, or capable of division. When placed in connexion with created materiality, it is perceptible in the appearance of light, which at once shews this to be a mode of action produced by the operation of spirit upon created matter. The same rule applies to electricity and heat. What I term the spirit of electricity has hitherto been confounded with those phenomena resulting from the application of this spirit to the surfaces of created bodies. Thus electricity has been held to be a very attenuate kind of material matter, travelling about the universe almost independent, as it were, of time and space. If it is really material matter, where

are its common qualities which identify it with other kinds of material matter? It has no weight, or shape, colour or size; it has no taste or smell. If it is applied to those material substances which have the greatest affinity for it, it simultaneously possesses the whole surface of the body, whether that be a stick of sealing-wax or a hundred miles of iron wire. If we attempt to divide it, this quality it will be found to possess only in virtue of the material created and combined matter with which it is contact.

This point is important to bear in mind, that if divisibility is found to characterize any body supposed to contain the immaterial spirits of light, heat, or electricity, it is not the immaterial or the material entity singly that yields this quality, but it is in the union of the two entities that divisibility becomes manifest. The electricity, therefore, which we observe by its effects to pass through our electrical machines, is the uncombined spirit, while the phenomena of electric light, phosphorescence, and other visible modes of action, are in these modes of action divisible; which at once proves them to be the product of the two entities in that particular manner I have shewn takes place in the production of all other phenomena.

So, likewise, heat, as we perceive it to be a recognizable mode of action of spirit on created matter, by this very fact proves itself to be neither a material nor an immaterial entity. Now, these modes of action are by no means determined to be caused by one particular kind of spirit, or one particular kind of matter.

And this, again, is conflicting to the notion that such phenomena are real entities either of matter or spirit. For as we know light to be the result of the application of not one only of the spiritual entities I have shewn to exist to material matter, but is produced alike by the spirit of heat and of electricity, and by their combined action, it is the less probable that such a mode of action should have any real existence as an entity. It clearly owes its phenomena as much to the action of the spirit of heat upon particular compounds of material or created matter, as it does to the action of the spirit of electricity upon particular compounds of material created matter. In this manner it is formed in the body of the sun, which is another inductive proof that that body is partly compounded of material matters, having some of the same qualities that distinguish the materials of our globe. But whether the light of the sun is the result of the simple application of the spirit of heat alone to the highly inflammatory materials of which it is composed, is very problematical, seeing there is great reason and evidence to suppose the spirit of electricity plays an important part in the production of light as we apprehend it from that body. While, therefore, I regard light to be a mode of action compounded of the two spirits of heat and electricity as they are brought to bear upon material substance, I am assured that the distinct operation of both spirits has been undoubtedly manifest in its production, though these spirits have not been recognized hitherto by philosophers as spirits. Nothing can more satisfac-

torily show that light is entirely dependent upon these two spirits for its manifestation, than the fact first announced by Morichini, that an unmagnetized needle could be rendered magnetic by the action of the purple rayolet of the sunbeam. This has been subsequently confirmed by many philosophers, who have shown clearly the power this rayolet possesses of producing chemical decomposition. Sir Humphry Davy was quite satisfied with this, and he also conducted some experiments to show, not only that the spirit of electricity entered the ray by the purple rayolet, or, as he thought, that electricity, whatever it was, was developed by this rayolet; but he also ascertained, by the most satisfactory experiments, that the spirit of heat entered the ray by the red rayolet, as proved by the different effects that rayolet had upon the thermometer. Add to this, the fact made known by Morichini that the refrangibility of light owes itself to the presence of the magnetic or electric power, the purple rayolet being the most refrangible, the violet next, and so on till it is imperceptible in the green rayolet.

Here, then, we trace the two spirits separately entering the prism on a true mathematical principle, exercising their specific influence upon material substance in a greater degree on those rayolets by which they enter, that influence being weaker as the square of the distance in the passage of the spirits to the centre of the prism, where the two spirits blend their action in the production of white light, the green rayolet being there separately formed by the blending

of the yellow with the blue rayolets which there meet. As all the rayolets conjoin to form white light, and as the spirits are simultaneous in their action upon the material substance they come in contact with, we may infer that every rayolet is more or less acted upon by both spirits reciprocally, but in graduated and different degrees, according to the composition of the material substance engaged in the development of each rayolet.

We see here, then, the necessity there is for the presence of these two spirits in the structures of plants, whereby the different colours of the leaves and flowers are secured according to the most accurate relation these spirits bear to the particular material they are brought to act upon.

That light is the offspring of these spirits with matter is the more undoubtedly proved by the phenomena of many inorganic bodies which owe their capacity to receive or retain the spirits both of heat and electricity, not simply in virtue of the particular kinds or even proportions of the materials composing them, but also of the particular collocations of those materials. Thus, the difference between fluid and crystallization in the elements of the same material is found entirely to regulate the capacity of those materials to receive, retain, or transmit the spirits of heat or electricity.

It appears, then, that these phenomena, and perhaps the qualities also that distinguish the natural bodies around us, are made and have been made in each particular instance to be the governing law to determine the amount of these spirits each substance is capable of

receiving or engaging, whether this be short of its chemical dissolution or its dissipation, or whether it be up to that point. Some natural substances, as phosphorus, so rapidly break up under the action of these spirits, that they are never found in nature in their unmixed state, and when so separated by art from other created materials to which they are united, burn away at the common temperature of the atmosphere. But when united to other matters, the process of destruction being retarded, that is to say, the action of the spirits upon natural bodies being weaker, we have as a substitute for actual combustion the luminous phenomena to be observed in mineral bodies whose elements contain oxygen, carbon, phosphorus, &c.: such are the diamond, topaz, mica, asbestos, rock crystal, barytes, and many others, amongst which may be named that singular species of fluor spar found in the granite rocks of Siberia, which, in all probability, is identical with the two stones Sir John Mandeville saw surmounting two columns at the entrance of a town in Great Tartary, and which shone so brightly in the dark. It has been found that these and other luminous bodies give out different degrees of light, both according to the amount of the spirits of heat and electricity applied, and the nature of the substances they come in contact with, some evolving a greater light than others. The light which the diamond gives out in the dark after it has been exposed to the sun's heat, or to the electric spark, is the same phenomenon, only differing in degree from that which resolved the diamond into its primary

elements under the fiercer application of the sun's heat through the great lens in the cabinet of Natural History at Florence by Sir Humphry Davy. The materials, phosphorus and carbon, are made to take a very conspicuous part in the organic tissues of the animal body, doubtless that the spirits of electricity and heat may the more readily effect those wonderful changes so abundantly developed in animal chemistry. And in a high degree we see those substances are made to compose the nervous tissues of animals, which are the organic parts specifically appropriated, not only to recognize the phenomena produced in all other bodies around us, but the junction of these spirits with matter, and to test, and in some cases, to regulate, their union as subject to the dictates and operations of the mind. The phenomena of vision, as well as of mind, as I shall presently show, owe themselves to the presence of phosphorus among other material substances in the brain, and it is certain the phenomena of those organs which cause sight and sound in the organic world could no more take place in the absence of the materials carbon and phosphorus, than the luminous appearance in phosphorescent stones could take place in the inorganic world without the presence of the material substances.

It may be the consequence of the union of the two spirits of heat and electricity in the body of the sun that the phenomena of daylight take place. And this idea is strengthened by the investigation of what composes a sun-beam. It is divisible into three or four great rays. It has been found that the central ray, as

shown in the prism, is composed of seven rayolets of different colours. At the margin of the ray where the vermilion rayolet appears, the spirit of heat, as has been stated, is clearly acting a part, while on the opposite side, where the purple rayolet is seen, the spirit of electricity has been shown to be present from the obvious fact of its producing chemical decomposition—the oxidation of silver.

If the spirits of heat and electricity are, therefore, present in the sun to produce white light, they are present also in the prism, which favours the idea that these spirits are everywhere in the created universe producing, when applied to created matter, different effects according to the material composition of that matter. Neither of these spirits can, then, be strictly said to proceed from that body, for, as spirits alone, they must pervade every space; and though, when disunited from created compound materiality, as in the atmosphere which is free from moisture they are invisible, yet that they are present everywhere is evidenced by the facility with which they can be obtained, and, when united to material matter, produce the phenomena of light and heat, and that independently of the sun; but they appear to require to be at a certain degree of tension before light can take place.

The sun would seem, therefore, to cause light as long as the atmosphere is presented to it, by which means the spirits appear to act in that order which produces light.

Light, then, is a product of the union of the entities,

as I have already shown, and so likewise is heat. The intimate concurrence of the two spirits producing these phenomena is strongly portrayed in some experiments: thus, the heat produced by the voltaic battery seems to be quite equal, if not to exceed in intensity, that produced by the sun's rays. The hardest mineral substances under such heat melt down and disappear as if by evaporation. Such experiments all help to strengthen the idea that sensible heat, like light, is a mode of action that cannot be effected short of the co-operation of the two spirits.

But if light and heat are really modes of action caused by the operation of these spirits upon created matter, they must needs be neither matter nor spirit, and therefore, to speak of light as an imponderable *substance*, is unphilosophical, and must help only to keep up the conflicting doubts which have ever surrounded the only two theories of light that have hitherto been propounded.

There has always been an apparent inconsistency in regarding light as a material body, simply because its rays, as they are called, have the appearance as though they passed out from the luminous body in a similar manner that material matter would be projected, viz., in straight lines. But these rays are partly the material matter of the atmosphere, as they have been illumined or made manifest by the immaterial spirits which, as spirits, are omnipresent, and have no need to be assisted by space or time, that they may reach our earth as if proceeding out of the sun, in the same

manner as created matter, would be required to move. I imagine it is hardly necessary I should attempt to prove that those kind of substances I call immaterial have not a material origin; for if we argue that light, heat, and electricity, are really material substances, we must adjudge the same property to mind; but if we regard them only as modes of action resulting from the unions of the entities and the subsequent application of the spirits to those created unions in the manner I have pointed out, we shall find no difficulty in showing that mind is a similar mode of action, and the same immaterial substances which are used to effect the order, beauty, colour, and shape in the supposed binary compounds of the inorganic world, will be shown to be engaged by organic bodies to which are added a higher spirit for the accomplishment of higher ternary and quaternary unions, upon which being completed, the phenomena of life and mind are developed. By this means the qualities of inorganic bodies become identified by the mind.

As a compounded result of the application of the material and immaterial substances so united and brought to bear upon each other, as we see they are in the structure and phenomena of our own world, we can speak of the reflection and refraction of light, and draw up geometrical tables and arithmetical calculations with great precision, without involving the question of its true nature; and we may shape our telescopes and draw undoubted inferences according to true scientific and inductive methods; but all this

supposes the undeviating accuracy and the unalterable operation of those laws first given to this earth by its Creator. No one can dispute their accuracy after having had the slightest insight into the discoveries of natural philosophy, neither do I suppose any one can seriously dispute their true cause, after a faithful and disinterested appeal has been made to the oracles of God. But before these instruments and calculations can with so much mathematical certainty be brought to bear upon the architecture of the heavens, we must be satisfied, in the first instance, that all the heavenly bodies are composed and compounded of the same essential material and immaterial elements. Otherwise, the phenomena resulting from the combination of such elements in our own world can bear no relation to a different one in the sense of those phenomena that follow.

And after we have ascertained what will be presently seen very strongly inclines to the idea that the elements of all created worlds are essentially and materially the same, we have in the next place to be assured that those elements in the construction of other worlds *are put together in the same manner* with our own, with a like disposition and proportion of the material as of the immaterial parts; otherwise our astronomical conclusions may be premature and illusive.

Of the phenomena resulting from the investigation of our solar system we can speak more clearly; yet if it should be proved that light is not composed of infinitely small particles of some material substance, but

only the omnipresent effect of one or two spirits upon the atmospheric material constituents, communicating with its great source in the centre of the system, we do away at once with much that is numerically absurd in the science of astronomy. Unless it can be shown that these spirits operate upon the boreal and anstral poles of other planets in the same most remarkable way that they do upon our own globe, we have just reason to infer that both the reflected and refracted light they give out is greatly modified in its appearance.

But there is also much reason to infer that the poles of other planets, or the solar system, are acted upon by the spirits of electricity and heat; and this may be sufficient to account for their conformity to the same general laws that govern their movements in relation to the earth.

The concurrence of the immaterial spirits we have been considering seems to be indispensable in the production of many of the phenomena of the universe. And arguing from analogy drawn from the action of these spirits upon the materialty of our globe, it is reasonable to suppose that as heat and fire are nowhere sensibly to be felt without the concurrence of some material substance, so we could not be conscious of the sun's heat unless that body was a compound of both material and immaterial substance; for it could not be a reservoir for the display of the calorific and luminous phenomena, unless the elements of materiality entered into its composition. For we have no

evidence to show, and no reason to believe, that any of the immaterial substances can *accumulate* in any place without the presence of material matter.

It is therefore most probable that the sun is the great emporium of these spirits, and may supply the planets and orbs within its sphere, in a similar manner as the suns of other systems may be the source and centre of these powerful immaterial substances in the production of the phenomena which govern the planets that surround them.

Undoubtedly these spirits have a greater tendency to accumulate in one body than another, and the materiality of the sun may be largely composed of those metallic substances, iron, nickel, or titanium, or some others unknown to us. For we find these spiritual substances have the power of contraction, and even of causing some modification in particular material bodies. Thus the combination of protoxide and peroxide of iron, silex, and alumina, is that most favourable to the development in a natural state of that magnetic power, so far as has been discovered. And so small a quantity of this compound as may be obtained by briskly rubbing iron against it, will charge other portions of iron with the same power. And the wonderful affinity this kind of material substance has for the magnetic spirit, led some philosophers to imagine that iron, in its most minute proportions, must enter into the composition of all bodies that are acted upon magnetically.

By electric immateriality it is that the earth receives

the power we term centre of gravity, and that of revolving on its own axis, so that, as if it really turned a material axle, it holds the globe in obedience to certain and unalterable movements. These movements are as much the sensible effect and evidence of its real existence in the boreal and austral poles of the magnetic axis, as colour in material bodies is a sensible evidence that the spirits of heat and electricity have been brought to bear upon them.

The effect of the spirit of electricity upon all bodies containing iron is to produce what is called the magnetic power in those bodies when placed in a particular position. This power is not conveyed to them in the same manner as the spirit of heat would be, but when those bodies are placed at right angles to the line of direction of the electric spirit. And this fact, first discovered by Oersted, puts us in possession of the fundamental rectangular force, a force unlike any hitherto discovered, by which the earth is made to revolve upon its own axle, while an extension of the same power would give the heavenly bodies a rotatory movement in their own orbits. Thus a stream of the electric spirit passing through the centre of a circle whose plane is perpendicular to the current, the direction of the electric spirit will always be in the tangent of the circle, or at right angles to its radius.

And while these spirits help to draw the heavenly bodies in their orbits round the centre of attraction, they also serve to maintain all material substances in tact upon the earth; the relative weight of those mate-

rial substances being determined by the special materiality and varied attractive powers of different bodies. But the different relative degrees and the particular relative proportions in which these spirits are brought to bear upon different kinds and combinations of material matter, the degree of pressure to which that matter has been subjected, as well as the methods of combining, although regulated by the operation of the spirits of heat and electricity in some way upon them, and obedient to fixed laws, are in the present state of knowledge inscrutable points not only in the first divine synthesis of matter, but also in the subsequent operation of those spirits in the formation of the moving phenomena around us.

Common sense points to the fallacy of supposing our globe, for example, or any other world, to rest upon nothing. And although both poets and philosophers have contributed to keep up this impression, it is not necessarily on that account the more true. Revelation most certainly does not favour such an idea; and when the Almighty discoursed with the patriarch of Uz on these matters, he distinctly asked him, "Where wast thou when I laid the foundations of the earth? Who hath laid the measures thereof, or who hath stretched the line upon it? Whereupon are the foundations (or sockets) thereof fastened (or made to sink), or who laid the corner-stone thereof?"

If the earth is simply poised in the atmosphere, as it is so generally thought to be, why were these questions put to Job? for in this case there would be no

foundation. Whereas the object of this discourse was certainly to convince Job that the foundation of the earth was very different in nature to the material foundations he was in the habit of beholding around him. But did the Almighty intend by this to infer that the foundation of the earth had no real existence,—that, in other words, it rested upon nothing? This would be advancing beyond the limits of the highest consistent poetical imagination. For it would be advancing beyond the bounds of reason or rational possibility to suppose the world rests upon nothing, as we have no conception how in this case it could be supported upon its axle. This foundation I hesitate not to say is the spirit of magnetic electricity acting upon the terrestrial poles of the earth. If the earth were really and only poised in the atmosphere, it would be impossible to carry out this idea upon the supposition that it is specifically lighter than the medium in which it is placed. But it would be unreasonable to suppose the earth can be supported in this way. Moreover, that its support and motion are dependent upon the spirit of electricity, the recent experiments of Faraday, who was the first philosopher that succeeded in making the pole of a magnet to rotate about a vertical conducting wire, would seem to prove. And the effect of electro-magnetic power upon a bar of iron in causing it to be suspended in the air in opposition to the force of gravity, seems at once to show us that the invisible *foundation* used by the Creator for sustaining the earth, was really the spirit of electricity modified by the materials it is brought to bear upon, in order to the pro-

duction of the magnetic action. This spirit is certainly confined in its magnetic characters to the terrestrial poles, and does not pass through the centre of the earth. Mr. Henwood, it is true, did not find any apparent difference in the intensity of terrestrial magnetism in his experiments in the Cornish mines, where it was found to be the same at a depth of 1200 feet, or 900 feet beneath the level of the sea, as it was on the surface; but nevertheless, it has been sufficiently clearly shown that all the magnetic strength is in the poles of the earth's axis, and not in the centre of that axis or in the *magnetic* poles.

Professor Hansteen's "Observations on the Position and Revolution of the Magnetic Poles of the Earth," show that there is some cause in operation upon the terrestrial poles which is subject to variation. To meet this, the two magnetic poles on the north hemisphere and the two on the south have been made to possess different degrees of strength: and without constituting the true axis, these two magnetic poles, which are really not poles but centres for attracting the electric spirit, may both be required to insure the true rotation on the terrestrial poles. If the spirits of electricity and heat conveyed in the sun-beams is the true moving cause, the variation in the passage of these spirits from the sun, or, to speak more correctly, in the operation of these spirits upon matter, and the different positions of that body in relation to our earth, will account for the variation in the positions of the magnetic poles, and also for the dip of the needle.

CHAPTER IV.

THE RATIONAL EVIDENCE TO SHOW THAT ALL CREATED WORLDS HAVE BEEN MADE, ARE SUSTAINED, AND WILL BE DESTROYED, THROUGH THE AGENCY OF THE SAME MATERIAL AND IMMATERIAL ENTITIES.

Created Worlds have a relative connection with each other by means of these Entities.

THE important and intimate connection between the spirits we have been considering, and other planetary bodies that perform their various orbits, together with our own earth, around the sun, naturally leads to inquiries of the deepest and the most interesting nature, closely bearing upon the subject before us.

The assurances we receive from the pages of revelation, of the universal dependence of every created thing, whether it be in heaven or on earth, upon the same all-wise and all-powerful Creator, urges on the reflective mind to contemplate the work of this awfully stupendous Being, with every power it possesses, and to long for that time when it can realise these dimly seen grandeurs, through those glorious bodies whose eyes will behold no limits in the sight of His infinite greatness, piercing even into eternity.

I have said I think it may be very strongly inferred that the two entities which enter into the construction of the materials of our globe, and which are made to perform the various phenomena that are attached to it, have been made to enter into the construction, and to cause the phenomena, of other worlds besides our own. And this may be deduced from the uniformity that pervades and characterises the whole of the phenomena of the solar system. In this case it will be necessary to bear in mind the argument that has been used to show that the sun in the centre of our system is a composite body made up of the two kinds of entities I have already stated there is so much reason to believe exist.

The fact is placed almost beyond a doubt, that, besides our own firmament, or that part of the created universe constituting the entire mass of stars, of which those we see on a clear night are only the nearest portion, there are numerous other firmaments, great and glorious as our own, separated from each other by space that is beyond measure, yet doubtless all connected by a bond of union that refers them alike to be dependent upon the Great Cause of all. The bodies moving in these different firmaments, remote and almost imperceptible as the *entire systems* appear to us, have, nevertheless, many characters in common, to identify them as parts of a great chain linked together with the same Almighty Hand. It is by these common characters that the mind recognises so much unity of purpose, as to be assured that the efficient causes employed

both to compose and regulate the whole of the celestial universe are to be identified as forming an integral part of each division, though their separation is marked by incalculable and boundless space.

There is some evidence confirmative of the idea that both the spirits and the material substances which may be supposed to enter into the mass of other planetary bodies partake in their elementary characters of the same entities as those composing our own. And it is not unreasonable to infer that the elements of uncombined materiality were synchronous with the first creation of immateriality; and that these two kinds of elements were first united to form our world at the period in the Genesis of Moses; though the same elements, if they constitute the bases of other worlds, might, in the sense of their natural union as we view them in this visible world, have preceded in actual existence the time when the Creator brought them to act upon each other in the beginning when He made the body of our globe.

But while I can rationally believe that all created worlds are composed of the two distinct and opposite kinds of substance we are considering, I am anxious to adduce such physical evidence of the fact as we may possess; and certainly this idea, that the primary elements of matter composing our earth are not limited to this globe, but are the same which, by variations in their relative quantities, as in their collocations, enter into the composition of other orbs, is greatly strengthened by *the history and chemical composition of those*

bodies we call aerolites or meteorolites. Coming, as there is the greater reason to suppose they do, from other planetary bodies floating in the same system, they must be regarded as, and placed amongst, the rational proofs to be brought forward of the identity that exists in the primary and uncombined elements of our own with other created worlds: for, without determing these bodies to be absolutely luno-volcanic, we have in their vast numbers, relative sizes, and magnitudes, both real and conjectural, an amount of evidence that denies them an origin from the moon; and as to their being projected from the earth, there are great difficulties opposed to such an idea. For it is unreasonable to suppose that so many thousand tons of matter could be projected from the moon without implicating the size, and consequently the regularity in the movements of that body; and as to their coming from the earth, both the laws which govern the movements of such masses, as well as the particular chemical composition they observe, are opposed to such a belief. There seems, therefore, more reason in the idea that these bodies form parts of those nebulous masses which we know encircle the sun, both singly and in groups, and which may have been original accumulations or formations of matter; or they may be, as has been suggested by Dr. Lardner, the wreck of matter of a ruined world. However this may be, in their material components we can trace no new substance which is not to be found in our own earth, while their mode of collocation is certainly different.

I am thus led to believe, with considerable rational and physical certainty, that the immaterial as well as the material elements of other worlds, though alike in entity, are nevertheless in their construction differently balanced and differently united to what they are in our own globe.

By this rule we can suppose that the immaterial agent employed to support our earth and regulate its motion is the same as that which acts upon the planets Mercury or Saturn. Yet the collocations and chemical unions of the material substance of the planet Mercury must certainly be very different from those of the planet Saturn; for if the unions of the materials in these two planets or any others are held together upon similar terms as those on which they are united in our own globe, the relative proximity of these different orbs to the sun would lead to the chemical destruction of the one by ignition, while that of Saturn, on account of the distance, would be impenetrably bound together so as to admit of no separation of its particles.

It is from the great difference in the visible appearance of the heavenly bodies that I am led to suppose the immaterial substances have not only different qualities, and also relative degrees of power, but that they possess also a power of occupying all space, while they at the same time are capable of being concentrated in a more condensed manner in the entire materiality of some orbs, or in particular substances upon those orbs; and, if this is true, our calculations of the phenomena of light cannot be reckoned with that degree of

accuracy by which we measure terrestrial magnitudes: for light, which I have shown to be the product of the spirits of heat and electricity, as they are applied to the materials put together in our earth and atmosphere, must be of a different character, perhaps neither reflected nor refracted exactly in the same way as that produced by the operation of the spirits of light upon the materials composing the planet Mercury or that of Saturn; and the difference in the colours of these and many other stars in the heavens favours this idea. Hence the Apostle says, "One star differeth from another star in glory." The word δοξα here means splendour or brightness, simply a radiation of light, and that, not according to its degree of distance from us, but to its intrinsic composition. The difference in the colour and brightness in different stars can only be accounted for on the supposition that they are not all composed of the same collocated matters. Thus, among the stars of the first magnitude, Sirius, Vega, Altair, and Spica, are white; Aldebaran, Betelguex, and Arcturus, are red; and Capella and Procyon are yellow. Mrs. Somerville observes that the double stars most frequently exhibit the contrasted colours. The large star is generally red, orange, or yellow, and the small stars blue, purple, or green. Sometimes a white star is combined with a blue or purple, or more rarely a red and white are united.

In viewing these stars from our earth at different parts of its surface, as, for example, in oriental countries, where the atmosphere is less humid, one star

shines like an emerald, another like a ruby, and the whole heavens seem, in the language of Dr. Nichol, "to sparkle with various gems."

In occidental countries, on the other hand, Dr. Scoresby has noticed not only the distinct colours and the brilliancy of different stars, but also the remarkable difference in their shapes, some of them resembling the most beautiful pendant lamps, hanging, as it were, by silver cords of brightness.

Moreover, these stars change their separate colours in the course of long periods of time. Thus Syrius, a white star, was celebrated by the ancients as red, which fact forcibly reminds us of the progressive changes the heavenly bodies* are probably destined to undergo from time to time; while the sudden appearance of some stars for a short season, followed by their final disappearance, and the total disappearance of other well-known stars, such as the star 42 Virginis, from the position they formerly took up, is an assurance to my mind that the dissolution of systems as well as worlds may form part of the gigantic scheme designed to bring about the final perfection of all things.

* "In 1572 a star was discovered in Cassiopeia, which rapidly increased in brightness till it even surpassed that of Jupiter; it then gradually diminished in splendour, and having exhibited all the variety of tints that indicate the changes of combustion, vanished sixteen months after its discovery, without altering its position. It is impossible to imagine anything more tremendous than a conflagration that could be visible at such a distance."—*Somerville's Connexion of the Physical Sciences*, p. 395.

These various and opposite colours in the celestial orbs must surely result from the different effects produced by the immaterial spirits causing light upon bodies of very differently combined elementary material: that the varieties in the arrangements and proportions of the material part are sufficient to cause this difference in the colour of light. This is more surely proved by experiments made with photometers upon the light given out by many kinds of bodies around us. Neither Leslie's nor Count Rumford's were found capable of yielding accurate results when the lights tested yielded different colours. Sir Humphry Davy passed an electric spark through a vacuum over mercury, and by admitting graduated quantities of air it became successively sea-green, blue, and purple. He therefore concluded that the electric light depended upon the properties of ponderable matter with which it was in contact. The *colour* of the light truly is influenced by the material parts, as this experiment plainly showed; but the light itself depended upon the union of the spirit of electricity with those material parts. There is little doubt the sea-green, blue, and purple colours given to the atmospheric air in Davy's experiment, owe their particular colours to the exclusive operation of the spirit of electricity in that experiment. Had the spirit of heat been introduced to a sufficient degree, these colours would have been joined by the yellow, orange, and red, the effect of that spirit upon the atmospheric materials; and this would seem to imply that the colours of celestial bodies owe them-

selves to the varied degrees of the two kinds of entity operating in their formation and phenomena. So that not only is it probable that the mode of arrangement in the elementary materials of the planets Mercury and Saturn differ from our own, but also that arrangement differs in other worlds according to the relation they all bear to the central sources of immateriality, by which they are governed and held together. And in bringing them into subjection to the great First Cause and centre of all, it is powerfully consistent with reason, and strongly to be inferred, that, regardless of their modes of combination and relative quantity, the immaterial agents He made use of in the general conformation of the universe should possess a common character, by which the whole series of created worlds should be knit together and held unitedly by one and the self-same Almighty God.

So, likewise, the primary elements of material matter, oxygen, hydrogen, carbon, nitrogen, and if there be any others, may not be confined to this earth or its atmosphere, but may form the bases of the material constructions of all other worlds throughout the universe.

Taking this view, both materiality and immateriality would be fundamentally, universally, and, in the sense of their nature, unchangeably the same; yet varying not only according to degrees of difference in their own modes of combination, but also in the different effects they mutually produce upon each other.

Created worlds will be destroyed by the same Entities.

In making these remarks I am not unmindful of the many controversial discussions the history of our globe, in particular, has received at the hands of geologists upon the great question of its antiquity. It does not enter into the plan of this work either to revive or to attempt to refute these doctrines. It will be sufficient for the purpose, here only to observe in passing the subject, that I have fully satisfied my mind that the two spirits of electricity and heat have been the appointed agents under God, not only for the carrying out of the first catastrophic change foretold and recorded in revelation, which this globe was once subjected to, but for the final dissolution of the same globe at that great event we are there told is yet future. The geological phenomena everywhere discovered to have taken place upon the surface and in the interior of the earth, all speak a language identical in meaning to that employed by the sacred historian.* These phenomena are exterded over so wide a surface, and many of them were brought about, if we judge from the effects they produced on the bodies upon which they acted, in so instantaneous a manner, that we cannot disguise the fact that some agent whose operation was quicker than thought must have been

* Gen. vii. 19, 20, 21, 22.

employed. I cannot resist the mention of two examples to confirm the truth of these two points.

To give an instance of the extensive character of one of these phenomena, and which shews that the spirit employed was influenced much by the material body with which it came in contact, I would mention the remarkable state in which the shell of the *Inoceramus cuvieri* is formed in the chalk formations, everywhere where those formations are seen. While the most delicate shells of the *echinus, cidaris, ananchytes, spatangus,* &c., are found entire, the shell of the inoceramus is seen broken up and disseminated in the minute fragments throughout the chalk in those parts where the animal was when the electric spirit caught it. This effect marks the appearance of the shell over mountainous masses of chalk in the chalk districts.

And to give an instance of the instantaneous character of that shock which no language implying the lapse of the shortest time can faithfully describe, I now mention the very remarkable position in which the ink-bags of the cuttlefish, *Sepia officinalis,* are found in the lias formations. These bags are found in the matrix with the ink unscathed, so that it would be impossible for the stroke of death to have been preceded even by the warning of one instant, or the animal in that time, as it is so accustomed to do, would have scattered its ink in its own defence.

With such ample power as is furnished by the spirit of electricity when in the hands of an avenging God, I can believe not only in the possibility or the proba-

bility that all the known geological indications of former ruin in the strata of our earth are to be referred to the diluvial catastrophe, and that alone; but I can fully satisfy my mind that the same spirit will, when in union with that of heat, finally effect that great destruction by fire spoken of by the Apostle Peter. The displacement consequent on the alteration in the relative position and consistence of the constituent atoms of one drop of water through the agency of the spirits of heat and of electricity, and the powerful nature of the force that resists any attempt to confine the particles of the smallest quantity of any material matter, when about to undergo a change from a denser to a rarer state, will help to convey to the mind but a faint idea of what is the power of such a force when it comes to be applied, whether for their preservation or destruction, to the immeasurable masses that compose the material part of the universe, and part of the bases of unknown worlds.

The knowledge we have attained to in exploring the wonders of the celestial universe, amidst the most undoubted proofs of design and omnipotence, all points to the fact equally sure and indubitable, made known to us likewise through the page of inspiration, and uttered by Him who made and who will destroy. There we read that the heavens or atmosphere, and the earth on which we live, shall pass away. "The idea of the ultimate dissolution of the solar system has usually been felt as painful, and forcibly resisted by philosophers. When Newton saw no end to the deranging effect of the common planetary perturbations, he called

for the special interference of the Almighty to avert the catastrophe; and great was the rejoicing when the recent analyst descried a memorable power of conservation in our system's constituent phenomena; but, after all, why should it be painful? Absolute permanence is visible nowhere around us; and the fact of change merely intimates that, in the exhaustless womb of the future, unenveloped wonders are in store. The phenomenon referred to would simply point to the close of one mighty cycle in the history of the solar orb; the passing away of arrangements which have fulfilled their objects that they might be transformed into new. Thus is the periodic death of a plant perhaps the essential to its prolonged life; and when the individual dies and disappears, fresh and vigorous forms spring from the elements which composed it. Mark the chrysalis! It is the grave of the worm, but the cradle of the sun-born insect. The broken bowl shall yet be healed and beautified by the potter, and a voice of joyful note shall awaken one day even the silence of the urn."*

We are thus permitted to reach another test in confirmation of that faith by which we believe that "the worlds were made by the word of God;" and by the same power also we are assured, "the heavens shall pass away with a great noise, and the elements shall melt with fervent heat," when "the earth also and the things that are therein shall be burned up." And in

* Views of the Architecture of the Heavens, by J. P. Nichol, LL.D., p. 197.

the accomplishment of this prophecy how readily is the mind led to believe, that the spirits now employed and wielded by the great Artificer of the created universe shall one day, when He may be pleased to withdraw His control from them, be made the engines of this fierce destruction, and in extension of the same power by which we have seen both the synthesis and the analysis of created matter has been effected, the great connecting forces will be severed, and the primary elements of both entities shall return to God, who made them.

CHAPTER V.

THE SPIRIT OF LIFE, AND THE PHENOMENA DEPENDING UPON ITS UNION WITH THE SPIRITS OF HEAT AND ELECTRICITY, IN LIVING BODIES.

In elucidation of the truths I have been considering in relation to the supposed existence of the two spirits of heat and electricity,—the subordinate twin-agency of the inorganic world,—I have been guided more by a desire to point out those circumstances and phenomena which I thought best calculated to prove their existence, than to give any lengthened or connected view of the laws which govern inorganic matter generally. For this would have obliged me to go far more extensively into the theory of inductive science than would either have been possible in a work like this, or even than would have been useful.

I have said enough to bring conviction to the mind, that the spirits of heat and electricity are playing an important part in the natural phenomena of the inorganic matter that surrounds us, and I shall in a future chapter endeavour to show the distinguishing characteristics of these and still higher spirits, so as to lead to the conviction that they are in their creation distinct kinds of the same class of entity.

Before, however, this can be done, some notice must

be taken of these higher spirits, and the influence they exert over the spirits that are subservient to them. That they do exercise a superior and controlling power over those that are below them, and that they are endued with more superior and remarkable qualities to accomplish this, cannot be doubted or overlooked.

The created substances we are now about to consider are usually called organic, in contradistinction to those that are inorganic. Their organization, their construction, and their phenomena, are so strikingly remarkable, so delicate, so elaborately contrived and so rapidly destroyed, that the mind is naturally struck with the contrast they afford when placed side by side or in comparison with the structure and phenomena of inorganic bodies.

It will be seen that the spirit of life in its simplest manifestation in the structures and functions of plants, is a spirit that has the power of putting together the primary elements, and particularly the gaseous elements of materiality, in such a manner and in such unions as are no where to be traced in bodies that are without this spirit. And the manner in which it treats with the subordinate spirits of heat and electricity, causing them to bring down their powerful but necessary agency in such a manner as to be made instrumental in carrying out some of the most delicate and elaborate changes which animal chemistry can effect, is truly wonderful. The subordinate spirits in organic bodies have the power to produce chemical changes in those bodies which, without the controlling operation of the spirit

of life, would rapidly destroy these living structures. Indeed, their power to produce flame and combustion in the organic world seems entirely to depend upon the presence there of some of the residual constituents of those bodies that have previously been endued with the spirit of life, and whose ultimate material elements are chiefly carbon, hydrogen, or oxygen. Thus wood and coke, bitumen, flax, wool, cotton, oil, and numerous other products of vegetable and animal bodies, yield their structures rapidly to the action of these spiritual entities when deprived of the conserving power of the spirit of life.

As we have seen the spirits of heat and electricity have been so universally engaged in effecting the unions and chemical changes so constantly required to carry on the phenomena of the inorganic world as of the universe at large, it was wisely ordered that two or three of the primary elements of materiality, which were to occupy so wide and so important a sphere, and to enter so largely and so minutely into all bodies, should have greater affinities for these spirits than other primary elements of matter. We therefore find oxygen, hydrogen, and carbon, but more especially the first, have a particular power of attracting the spirits of heat; and as vegetable and animal structures are almost wholly composed of these material elements, we must not be surprised these structures in particular are so easily broken up, when left to the unrestrained action of these spirits upon them after the spirit of life has been withdrawn.

It is with these immaterial substances, which have their boundaries, as regards the present world, confined within certain limits to bodies more highly and peculiarly organized to receive them, that I have now to draw particular attention, as these spiritual substances here operating do not differ from those we have been considering, in the sense of their being the same class of entity which partakes of the nature of spirit, whatever that may be, but only in the sense of their different kinds. I shall have to show that what is termed life and mind are modes of action resulting from the application of immaterial substances of a higher order to inorganic matter, by which means new combinations are formed, which constitute the material bases of living bodies.

It is therefore incorrect to speak of life as exclusively of an immaterial nature or even character, because that term is made use of to express phenomena the result of the mixed application of spiritual to material substances, in like manner as we have shown light and heat to be results from the application of the spirits of heat and electricity to particular material matters. Life, therefore, is not a material nor an immaterial entity, but, like light and heat, it is only a mode of action produced in the manner I have stated, and mind is a similar kind of term applied to a particular mode of action. Life and mind, then, like light and heat, are modes of action resulting from the concurrence of the two grand classes of entity we have been considering. But as in the phenomenon of light both the spirits of heat and

electricity are required to give their aid, so in the phenomena of life the spirit of life is required to be superadded to those of heat and electricity before that mode of combined action we term life can be produced; and the addition of this spirit is the cause of the more complex material unions we see formed in bodies so endued.

Material modes of Union of Bodies formed by the Spirit of Life.

It is necessary to investigate the means employed in a material point of view for effecting those phenomena which characterise living bodies; and this will leave no doubt in the mind that what are termed sensations, perceptions, and ideas, in common language, have really no entity of existence in themselves, but are only signs of particular modes of action, the effect of the combination of more elaborate unions of the two grand entities I have pointed out.

It is, then, very palpable that the spirit of life has a power of controlling those spirits we have shown to possess so wide a power over inorganic matter. And the result of this is the bringing together of material elements in an entirely new method which is more complicate in character. So that substances which form the material elements of living bodies are made to unite by three, four, and even five together, and so to make ternary, quaternary, and quinary compounds. Now, these material bases we may trace up from the simplest forms of elementary matter. We see them

united in their material parts in binary forms in the inorganic world. Then, under the power of that added spirit we have now under consideration, they take, as in the vegetable compounds, a ternary mode of union. The union is still more complicated in animal organization; so that to unite them in combinations such as here take place, of three, four, and five of the elements of the material matter together, it is an indispensable law of these higher living bodies that the material elements should first have been united in the ternary compounds of vegetable structures.

So that in the building up of the material elements alone, in the structure of living animals, we observe the highest order of synthetical gradation, beginning with the primary elements, and ending with the most highly wrought animal tissues.

Spiritual modes of Union in co-operation with the Spirit of Life.

And as we observe this gradation of power and complexity to distinguish the material combinations of living bodies, so may we detect a similar gradation of power in the immaterial combinations which are there formed and employed. We first observe the inorganic binary compounds are united by the aid of one or two spiritual substances. As we advance into vegetable life we find there isa spirit of immateriality then for the first time introduced, which controls the others that are also present. This spirit is indispensable in effecting the phenomena of vegetable life. And in

the operations of life, as we observe them carried out in the bodies of animals, there is a still higher degree of the spirit of life, or else a distinct and yet higher spirit, which shows itself in the capacity to engage, combine, and control the other spirits below it. It is hardly necessary to remark here that the spirit of electricity in the living animal structures is proved by many experiments. Pfaff shewed that in a healthy man positive electricity is evidenced. Sanguine temperaments have more free electricity than phlegmatic, and alcohol is found to increase the quantity. Women are found to be more frequently negatively electric than men. Bodies that are very cold give no evidence of electricity; but, as warmth is restored, it becomes more manifest. Certain diseases, such as rheumatism, shew a reduced amount of electricity to be present with them. Blood is found to retain the spirit of electricity long after its removal from the body.

It is not necessary to quote any experiments in proof that the spirit of heat is engaged in the carrying out of many chemical changes and phenomena of living bodies.

Now, in the phenomena of perception, so much disputed about by mental philsophers, we cannot help recognising some confirmation of this graduation in the power of the spirits, when we behold the shapes, sizes, colours, and all other properties of the outward and material world around us. For in being able to recognise and to realize them as the true condition of

things, the composition of the instrument of perception must not only be resolvable into the same primary elements of material matter; but those elements must also treat with similar immaterial elements which unitedly help to manifest the outward world to the mind. And hence the composition of all living bodies is made up of the same primary elements of material matter,—oxygen, nitrogen, hydrogen, and carbon, and the same primary elements of immaterial substance,—the efficient cause or spirit of heat, electricity and life, and their results, are, according to the number, the complexity, and the modes of union in which these elements are engaged.

Inorganic bodies generally unite their *material* parts in what are termed binary or double binary unions, as the case may be; to effect which, the spirits of heat and electricity have most certainly been employed. Organic bodies in the vegetable creation require that the material elements should be united by threes; to effect which the co-operation of a higher spiritual entity is necessary to bring their union together, and to regulate the degree of power exercised by the lower immaterial substances employed. And as we advance to the still higher organization of animals, a mode of combination, both in the material and immaterial elements, takes place that is truly incomprehensible. Here both kinds of entity are brought together in greater numbers and more elaborate unions, so as to baffle all our efforts to imitate them, or even to investigate many of them.

Thus the analysis of inorganic substances around us are capable of the most satisfactory confirmation, in consequence of our being able in some instances to command synthetical arrangements. So that we have here the surest proof afforded us of the methods pursued in their original construction. The composition and relative proportions of water, sulphuric, nitric, phosphoric, and carbonic acids, are sufficiently known to lead to the right application of the spiritual agents required to put these bodies together, after the manner supposed to have been adopted in the original creation of those bodies.

Here, however, our synthetic powers leave us; and the putting together of the simplest vegetable elements united by the spirit of life, so as to produce the ternary compounds of sugar and starch, have consequently never been achieved. Many have been the attempts to form these triple unions by the aid of the spirit of electricity, but they have signally failed in spite of the persevering efforts of Cross, Weeks, and other experimenters.

How much less likely are we to be able to combine the still more highly complex quaternary and quinary compounds, does not surprise me, when I am satisfied they are effected solely by the operation of the spirit of life,—a spirit which, inasmuch as it is of a higher and more delicate character, is found to possess a fewer number of bodies in the creation, and in possessing these, to be less closely adherent to them, and consequently more readily expelled from them. In animal

bodies, three, four, and even five mutual elements are held together by the conjunctive and graduated powers of the spirits of electricity, heat and life. And the effect of this elaborate co-operation is the production of that microcosm of surpassing wonder—the living animal body,—the noblest and greatest evidence of omnipotent power over all created substances, spiritual and material, that can be advanced.

The Power of the Spirit of Life to build up Organic Structures.

We come now to another and very important characteristic which marks in organic bodies the operation of a higher spirit than those of heat and electricity. We may observe that, in the simple binary compounds of inorganic matter, the unions generally are those of a gaseous with an earthy, alkaline, or metallic element; thus, oxygen will unite with potassium, silicon, or iron, &c.; and these unions always display an order of selection, called, in the language of chemistry, elective affinity, which, if it did not observe the very fixed and unalterable rules in these unions, which never vary, we might be disposed to think they resulted from the operation of choice inherent in the substances so united. These affinities may, however, be equally well explained, by supposing the attractive power of these different bodies to be governed by their relative capacity to receive a greater or less amount of the spirit of electricity. But from the very commencement of that scale of bodies in which the spirit of life is

reposed, we not only have the primary bringing together of the material structure most remarkably altered, but in addition to this, we must be struck with the fact, that now, for the first time, an apparent sensation is manifested which leads to the selection of particular inorganic matters, which, when secured, are conveyed through certain organic textures to that part of the organism they are destined to fill up. How wonderful is the power that gives to the corn of wheat this sensitive selection, by which means it builds up, first the blade, then the ear, then the full corn in the ear. In carrying out this process, the spirit of life would, like the lower spirits it here engages, seem to give a particular degree of power according to the nature of the particular material part of the organization. The gaseous elements are carried up from the roots in combination with the earthy and other bases; and they are conveyed also through the leaves; so that it has been shewn that many plants—such as the *ficus elastica*—have been for many years supported in the air without communication with the ground by roots; and experiments have shewn that in this state many saline and earthy matters have been introduced into the structure of plants, which proves that our atmosphere is capable of conveying inorganic matter through the leaves into the vessels and internal organization of plants, when aided by the spirit of life. The power to select the binary compounds of inorganic matter,—potash, soda, phosphoric acid, silica, magnesia, and the like, and to carry one to the stem, another to the leaf, and a third to the

fruit, is, however, more forcibly shewn in plants naturally deriving nourishment directly from the earth. No power could be given by the spirits of electricity or of heat, so that the vessels of a plant could be able to select amongst a variety of mineral matters, silex, potash, phosphorus, and the like, and convey them, with the ternary compounds of starch and gluten, into one particular structure or part of the plant, and not to another. This seems to be an office and power over and above, and independent of those phenomena in vegetable and animal structures we observe to be accomplished in the operation of light and other products of the spirits of heat and electricity. This combined power in the production of the phenomena of sensation and volition, and the extraordinary connexion and adaptation of these exalted properties to the power to recognise and contemplate all created things, strongly and unfailingly points to the identity of elements that have been embarked, and the intimate relation the whole of those elements bear to each other, and to the Supreme Being that made them.

The superior and delicate nature of the spirit of life is strongly contrasted with that of electricity, which it has so often been thought, not only to resemble, but really to be. And there is the one distinctive evidence I have pointed out in this chapter which clearly claims for it a separate kind, and this is that we never find ternary and quaternary compounds occupying a position in the material world which would lead us to suppose that they have not been brought into existence and

acted upon by the immateriality of life. To this must be added the power of sensation by which certain material substances may be selected.

The distinguishing difference between vegetable and animal bodies, both which are alike constructed according to some organic arrangement, supported by air and food, are endowed with the spirit of life, and consequently subject to be decomposed in their material parts when that spirit is withdrawn, is most chiefly to be recognised in these two particulars; first, the elementary material unions are higher, and secondly, to accomplish this it is indispensable that the unions of three material parts should first take place in vegetable bodies to furnish the bases of animal structures, these latter not being able to subsist upon binary compounds. Whether these latter phenomena are the result of the operation of a different kind of spirit to that which animates the brutes, or whether they are not considered to be of a sufficiently diagnostic character, I am not able to determine.

In animal life, ideas and thoughts, the result of mixed sensations, or more varied displays of the abstract power of sensation, are superadded by means of a cerebral apparatus to simple sensation which alone takes place in vegetable life. In connexion with this additional organic part, I shall proceed to consider some of the operations of the spirit of life. Before, however, I do this, it will be right to take a view of the three spirits I have been pointing out in their more conjunctive operations.

CHAPTER VI.

THE COMBINED ACTION OF THE TWO SPIRITS OF HEAT AND OF ELECTRICITY IN THE PHENOMENA OF INORGANIC BODIES; AND OF THE THREE SPIRITS OF HEAT, ELECTRICITY, AND LIFE, IN THE PHENOMENA OF ORGANIC BODIES; REVIEWED, AND THEIR SEPARATE IDENTITIES SHOWN.

THE arguments authorizing a belief that material and immaterial substances have a separate and a real existence having been adduced, and some of the qualities and phenomena resulting from the two different ways in which these two great entities are found to unite in the formation and the carrying on of the created universe having been pointed out, I shall now go on to notice some of the more complex operations of the two spirits of heat and of electricity as they blend their powers in the production of the higher forces and more intricate movements of the inorganic world. These movements and operations, when joined by the spirit of life, partake of the highest and most obscure complications, as they are displayed in the structure of living bodies. Afterwards I shall consider the several more decided proofs of the separate existence or individuality of these three spirits.

The Union of the Spirits in the production of the higher phenomena of Natural Bodies.

The distinction between the qualities stamped upon created bodies at their original creation by the aid of these spirits, of heat and electricity, and the phenomena they are observed to cause in the movement and displacement that is constantly going on in the natural operations of the universe, may, however, be made clearer by tracing the connexion those qualities and phenomena bear to each other as the effect of the combined action of the two spirits with matter under particular circumstances. We will take for example the quality of globularity, and view it in connexion with the phenomena of motion.

Even the permanent qualities of natural bodies I have endeavoured to show could not have been given to created substances, as they are found united in nature, without the concurrence of these spirits with uncombined material substance. The *form*, therefore, of natural bodies must have been regulated by these spirits. And we shall presently see all the *moving* or *active phenomena* of the universe are remarkable for being associated with one particular form, which they invariably assume.

The division of all natural bodies into liquid and solid is that which we now observe to mark the two very different states in which these bodies are found. But there is the greatest evidence, by the investigation of the various structures of solid bodies, to lead us to

conclude that in the original process of formation all the primary material substances were in a liquid or gaseous state. In such a state, if we judge from the characteristic form of all liquid bodies, as well as the solid structures of all those bodies endued with the spirit of life, we shall have little doubt that the original form of every created substance was *globular*. But as many of those substances would not be required to enter into the moving phenomena of creation, and would, moreover, be made use of to form the solid basis of our planet, it was necessary to bring the particles or molecules so closely together, as that, by intimate contact, they might form solid matter. This was accomplished by removing the *atmospheres*, as the spirits of heat and electricity that surround the gaseous particles of all bodies are called, and so depriving those particles at once both of the power of being globular and of retaining the fluid character.

Being thus fixed in their different mineral relations, we notice the most remarkable external characteristic of these solid masses of inorganic matter is their external form. Where any *regularity of form* is to be observed in them, as in crystallization, the form is confined to flat surfaces and right angles, varying their inclination according to fixed laws that govern them.

All those substances which are not so fixed and solidified, but that are required to sustain certain operations connected with the *motion*, whether of the celestial orbs that revolve in the universe, or of bodies upon the surface of our globe to which has been attached

the spirit of life, have also a form which remarkably distinguishes them. This is more or less round or oval. Such a shape has many advantages attached to it to render it indispensable. The two spirits of heat and electricity could thus surround it; and as in the case of the grander and more stupendous celestial bodies, so in that of the most minute and invisible molecules that float in the atmosphere, these spirits are brought to bear upon such bodies in the production of the natural movements and forces peculiar to each. The globular form, then, of natural bodies, thought, from its universal prevalence in organic structures and substances, to be characteristic of these alone, is a quality imparted to all matter, the atoms of which, for the most obvious purposes, are required to be in a liquid or a gaseous state,—in other words, whose molecules are so far separated from each other by the spirit of heat, as to admit of the action of the spirit of electricity upon the surface of every individual molecule, whether at our temperature or at one higher. The minerals mercury, pitch, and naphtha, are in their atoms globular, because, like water, they are liquid; and we observe the same form in those mineral bodies found in the igneous rocks, which were doubtless at some former period in a liquid state, called, from their resemblance to small almonds, amygdaloidal; and in oolitic limestone, which was doubtless originally in a fluid state, the particles observe the same shape. The same form is assumed by the heavenly bodies around us, as well as by our earth, which was at the creation, in all

probability, raised to that degree of heat so as to admit of all its particles being separated and kept in a liquid state previous to the several operations it underwent at that event. And that the spirit of electricity is chiefly instrumental in causing matter to assume this globular form, is shown by the experiments of Treviranus, and of Prevost and Dumas. Treviranus observed, that as liquids passed into a solid state to form the animal tissues, globules were distinctly perceptible. Thus, in the artificial coagulation of the white of an egg, he observed this form was taken. And Prevost and Dumas submitted the albumen of egg to the action of the positive pole of the galvanic pile, when globules were distinctly formed.*

It has been shewn how, in the original formation of water, the spirits of electricity and of heat may be detected (p. 40). And the further conversion of this fluid into vapour is undoubtedly the effect of the subsequent application of the spirits of heat and electricity to every separate molecule. Without the concurrence of these spirits in their operation upon the water on the surface of our globe, the phenomena of clouds and rain, lightning and thunder, could not take place. When the moisture of the atmosphere is condensed, by being converted from vapour into rain, this is brought about by lessening the number of globular molecules. To effect this, the spirits of heat and of electrictiy are withdrawn from the surface of these

* Tiedemann's Comparative Physiology, translated by Gully and Lune, p. 21.

minute vesicles of vapourous water; and on this account the atmosphere always shows strong positive electricity when condensation is taking place. To insure the opposite condition to this, by converting water into steam, the absorption or the engagement of these spirits is proved from the fact that the atmosphere, when this process is going on, is always in a negative state. If an insulated conductor of the spirit of electricity is brought in contact with a jet of steam, it first exhibits what is called negative electricity; in other words, all the spirit of electricity conveyed through the conductor is taken up to augment the vapour. When this vapour is again condensed, the electricity being disengaged, it becomes positive in the atmosphere around. If the conductor is removed further off from the orifice where the steam escapes, the electricity becomes more and more positive, which shews, the spirit of heat being absent or too feeble here, that the phenomenon of vapourizing the water has stopped, from the spirit of electricity refusing to join without the concurrence of a certain degree of heat. Water, in its passage into vapour, has, therefore, need of not only the electric, but also the calorific spirit. In the artificial process of boiling water, the application of the spirit of heat through the fire causes the bulk of the water to expand, and in this state, being joined by the electric spirit of the atmosphere, it becomes converted into minute globules, each being supported in this position because it is surrounded by a surface for the action of these spirits. The same

phenomenon is produced naturally, when the sun's heat is brought to bear upon the surface of water. The water is thus taken up, by the aid of the two spirits conveyed in the sun-beam, into the higher regions of the atmosphere, and there, parting with the two spirits it received from the sun-beams, becomes again condensed and converted into rain or hail. And thus, when suddenly disengaged to a sufficient amount, the spirit of electricity produces the phenomena of lightning, which is identical in character with the electric spark from the prime conductor of an electric machine.

Every distinct globular molecule we behold, therefore, in nature, implies that the spirit of electricity acting upon its surface produces the globularity; and it is possible all these rounded particles constituted the first and preparatory operation of the spirits of God upon material matter, before they were cemented together in the formation of the different material substances. And so cemented together, these globular forms no longer presented their individual surfaces for the operation of the spirits upon them; but this action was transferred to the general surface of the body they, in the aggregate, went to form.

The globular form, it will be obvious, is a quality quite different, though not altogether independent, of that of consistence; so that in effecting these two qualities there is the operation of two efficient causes—namely, the spirit of heat joined to that of the spirit of electricity—evidently to be traced. The shape

could not be effected simply, by the action of the spirit of electricity alone upon it; but some other spirit is required to raise the temperature, and so expand the substance by altering its consistence, so as to admit the action of the spirit of electricity upon the smallest part; and this spirit is that of heat. The two spirits, instead of being identical, as heat and electricity have been thought to be, would seem here to have not only distinct, but rather opposite actions to produce; for while the spirit of heat is necessary to expand, and so to separate and keep separate the individual molecules, the spirit of electricity is required to surround them, that their spheres may be kept together.

The use of these two spirits having been thus far separately and unitedly pointed out, we will go on to consider the connexion the globular form bears to the phenomena of motion, before we blend the operation of the spirit of life with those spirits we have been speaking of.

Every body, whether it be organic or inorganic, that possesses the power of motion, assumes either the spherical or oval form, and the faster it is required to move the more circular it is. The mind naturally assures itself of the truth of this, by the comparative facility with which all bodies that have been deprived more or less of their sharp angles and edges are made to move by the artificial application of force. And in order to carry this law out in the movements required for the sustaining of life in the vegetable and animal structures, we find the different substances, the

most simple as well as the most complex, are there uniformly made to assume the globular or the oval form. It was, therefore, indispensably necessary that this quality should first be given to bodies, previous to the production of the phenomena of motion.

But motion, in whatever form we contemplate it, while it is quite explicable upon the principle of the application of the spirit of electricity to the surface of bodies, cannot possibly be shown to proceed from any inherent quality or power in the bodies themselves. Neither shall we be able to prove this by examining the higher organization and phenomena of living structures. When Newton discovered the phenomena of gravitation, immediately he set about to prove they were as much and entirely material as the substantive bodies so acted upon. And this contributed to maintain an idea, already very prevalent, that material matter was a mere mass of inactive substance, only susceptible of the power of motion by the external application of force, which before had no connexion with it. For if it had been argued that the true cause of motion was something of the nature of spirit superadded to mere material matter, it would have struck at the doctrine of imponderable agents. But it must be perfectly obvious, upon deliberate consideration of all material matter that has been endued with the quality of globularity, that it is by no means in a state of rest, or free from some form or kind of motion, and that from causes independent of the external application of force; and whether that motion is attraction or repul-

sion, gravitation, dissolution, conflagration, or any other action produced by the combined operation of the spirits of heat and of electricity, it is undoubtedly motion, and that resulting from the application or the abstraction of these spirits, which are independent of the bare material matter. These agents, by being added to or taken from material matter, are the cause of certain alterations, dissolution, or re-arrangement of particles in created matter, that cannot be effected without their instrumentality; and thus they are the exciting cause of motion. This is as clear as that the efficient cause of life is quite distinct from the organic structures to which it is attached. The activity and motion of inorganic matter is not an activity inherent in the substantive matter itself, neither is it caused by outward force applied to that matter, but it is the result of the union of the spirits of heat and electricity in one form or other with different material matters, to which they bear specific relations, which produces the force.

Regarding the phenomena of these two spirits in the light of a connected chain of forces, without knowing to what cause they are rightly to be referred, we have many most interesting natural phenomena shown to be mutually dependent upon, or in communication with, each other, by Mr. Grove,* who has ably explained the correlation and inseparable connexion which exists in all these forces or phenomena. Thus, he

* On the Correlation of Physical Forces.

attempts to show the production of all the other modes of action in the following experiment are caused by the application of light as a force. "A prepared Daguerréotype plate is enclosed in a box filled with water, having a glass front with a shutter over it; between this glass and the plate is a gridiron of silver wire; the plate is connected with one extremity of a galvanometer coil, and the gridiron of wire with one extremity of a Breguet's helix; the other extremities of the galvanometer and helix are connected by a wire, and the needles brought to zero. As soon as a beam of either daylight or the oxyhydrogen light is, by raising the shutter, permitted to impinge upon the plate, the needles are deflected: thus, light being the initiating force, we get *chemical attraction* on the plate, *electricity* circulating through the wires, *magnetism* in the coil, *heat* in the helix, and *motion* in the needles." These different and successive modes of action receive, according to my theory of immaterial spirits, a most satisfactory explanation by supposing here the two distinct spirits of heat and of electricity, by raising the shutter, are brought, through the medium of the beam of light, to bear upon material matter of different kinds, characters, and affinities, which cause the several phenomena spoken of. These phenomena are simultaneous, not successive.

And when we behold the operation of these spirits as they are seen to govern the movements of the heavenly bodies, we can no longer deny that motion, in its truest sense, is eminently a phenomenon attached

to matter in its inorganic as well as in its organic forms; and that, not according to Leibnitz, as consisting of living monads, or, according to others, and more generally believed, as resulting from some subtile etherial fluid, which is thought to pervade all matter in common, but the natural effect of the operation of the spirits of heat and of electricity upon the surfaces of those molecules which form the elementary bases of all moveable matter.

When the philosopher recognizes the same principle or phenomenon of motion he sees vested in the higher-wrought living structures is to be traced to many bodies moving in the inorganic world, he will be more disposed to refer the phenomena here to the same universal efficient immaterial cause he sees acting alike upon both. Nor can he satisfy himself that in bodies without the spirit of life the motive power has less claim upon the electric spirit than it has upon those bodies that have the spirit of life and mind. When we say in chemistry one body has an affinity for another, we in other words say those bodies have the power of motion, however limited or mechanical it may be, in which the power of choice is *apparently* displayed. This motion differs from that of voluntary motion in animals, in that the affinity cannot be said to be the result of choice, as it is always determined by fixed laws. But the phenomena which call for motion in the organization of animals require that much of that organization should be in a fluid state. The contrivance for insuring the safety and integrity of that

organization, so that the fluids may perform their numerous evolutions without hindrance, is one that calls for the additional assistance of the spirit of life.

Every part of the structure of animals is characterised by the globular form of its molecules, and as, in the inorganic world, this form has been shown to owe itself to the spirits of heat and of electricity which surround them, so here, doubtless, the same spirits are called to produce the same effect in the organic world. Yet it will be remembered that animal tissues are made up of the most numerous and heterogeneous substances, which are here united in new forms, and in such a manner as is not found in any other structures. While, therefore, the *fluid* condition of some animal substances is maintained in the midst of more solid parts, and the rounded character of the molecules is that which distinguishes them, it is easy to suppose the two spirits of heat and electricity would suffice. But when we come to account for the ternary and quaternary unions that take place in the bodies of animals, no spirit short of the spirit of life will be found to accomplish all these ends.

It is possible to account, therefore, for the fluidity and motion of living bodies through the spirits of heat and of electricity; but their composition cannot be attained without the spirit of life. While the solid materials of the blood are kept fluid by the spirit of heat, their various globular shapes are all surrounded by the spirit of electricity, which spirit is thus brought in contact with the walls of the heart, and so gives rise to

muscular contraction. Muscles are not the only parts of animals that move; for some animals are entirely composed of cellular or mucous tissue; and this shows that the moving power is not vested in any particular part, but is added to it. But it is the particular unions of animal compounds brought together by the spirit of life, being carried, by the subordinate means we have been considering, into the several viscera of the body, that lead to the higher operations that characterize living bodies.

It will thus be seen that the combined operation of the three spirits of heat, electricity, and life, while separately to be detected in the particular phenomena they produce in living bodies, are nevertheless unitedly required to blend their powers in the production of the highly elaborate animal formations.

It is by no means improbable that further scientific research may reduce many of the phenomena we at present refer to distinct imponderable agents, as they are called, to one and the same spirit; or the operation of two spirits, as those of heat and of electricity, may be concurrent in the production of many phenomena. Thus gravity, chemical attraction, polar attraction, magnetism, electro-magnetism, and many others, may hereafter be shown to be different modes of action, or modified operations of these two spirits, the difference in all these modes of action being only the result of the varied proportions, qualities, and collocations of material matter with which these spirits are found to act. The

experiments made by Dr. Faraday* upon electricity of late years, strongly go to prove the identity of the five several varieties of electricity that have been discovered, viz. the common electricity of tension, the voltaic, the magnetic, the thermal, and the animal electricities. It is the wonderful discovery of Oersted, that two of these kinds unite their peculiar powers to produce new and more complex forces never before known, which yield the tangential and rotatory forces, and by which the earth and the other celestial bodies in all probability are moved.

We have in these, and many other phenomena where the spirits blend their power, much that will receive no other explanation than that which gives a mutual, concurrent, and simultaneous action of two or more spirits upon matter. But this co-operation must not be confounded with the distinct identity of the spirits, to the consideration of which I am about to pass on. We must contemplate many of the phenomena of nature even in a still more blended sense; for it will be observed that not only do different spirits unite their powers to produce these phenomena, but those phenomena are governed by the nature of the material substance on which they act; and in this manner it is possible that different modes of action again unite their powers in the production of the more highly induced forces.

* Experimental Researches.

The Characters which mark the separate Spirits.

The great and universal identity which points to God as the source and centre of all spiritual power,—the mutual dependence and connection its manifested varieties appear to exercise upon each other, and particularly the modifications they seem to undergo in their higher displays of power when united to organized bodies,—are so many arguments that at first sight may appear to favour the idea that the spiritual power I have recognised, both in inorganic as well as in organic bodies around us, but especially in the former, is one and undivided; that the various characters it displays in the phenomena of the visible world, and the various effects it produces upon material matters, are all to be traced to the degrees of power it possesses, or the difference in the component elements of material matter with which it comes in contact, and not to different kinds of immaterial entities. There are so many natural phenomena, some of which have been adduced, that are apparently so closely allied to each other, and, indeed, seeming to have one common efficient cause for their origin, as to strengthen greatly this impression that the cause, whatever it may be, is undivided. We cannot on this account be surprised at the opinion that has recently been expressed by an American writer in favour of "the identity of light and heat, electricity and caloric."* But it must be ad-

* By C. Campbell Cooper, Philadelphia.

mitted there stand opposed to this idea some most conflicting obstacles. It is true that in revelation we are led to believe the entire control of the whole phenomena of that wonderful event, the creation of the world, are clearly preceded by an operation that implies that the spirit of God was the sole moving, creating, and directing power. "The spirit of God moved upon the face of the waters" before the separation of the elements and the distinct creation of the several forms of mineral, vegetable, and animal matter that took place.

Yet the fact of there being separate gradations and separate existences of immaterial entity or spirits, need not disturb the undisputed and controlling power the Creator is able to exercise over His own work. And this controlling power speaks for itself in the gradation as well as in the co-operation of the inferior spirits. That these gradations do exist is made evident from a variety of facts and phenomena that cannot be mistaken.

The view, also, of the consecutive acts of creation recorded in revelation leads to the undoubted inference that the immaterial entities employed to produce light were, in their operation upon matter, independent of those entities subsequently brought to bear upon the further acts of creation as they are viewed in connection with organized bodies.

If, therefore, we do not divide immaterial entity into kinds, we must into degrees, and this leads to the most confused deductions: indeed, in the case of organic

spirits, it is quite out of the question to attempt to reconcile the difference according to degrees. They must either be regarded as not to exist at all, or they must be looked upon in kind as something distinct.

Certainly, when we see the action of these immaterial causes to be so dependent upon each other for the evolution of their power, and that the natural phenomena we behold to be resulting have been shewn to owe their manifestation to the combined operation of these causes, there is at least a difficulty in being able upon all occasions to distinguish them apart. Like the material matters of the universe, the action of one, two, or more, upon each other, is productive of the most unaccountable difference in the outward appearance of bodies, which the laws of synthesis have not in our present state of knowledge attempted to explain.

Thus, the manifestation of the phenomena of electricity upon all matter, is greatly dependent upon the presence not only of the spirit of electricity, but also of that of heat, and there is much to lead to the belief that in the higher phenomena one spirit does not act without the other. But this mixed mode of action is certainly not here incompatible with the separate existence of the immaterial entities.

It will be noticed that one of the great characteristic marks of distinction that points to the separate condition of different kinds of spiritual entity, is the very different effect they produce upon material matter. On the proof of this difference the doctrine of distinct

spiritual entities can alone philosophically rest. It is, however, a doctrine undoubtedly to be drawn from revelation.

Nor can this difference produced upon material matter be explained alone by the difference existing in the chemical unions or proportions of the material part, for the office of the spirits, though blended together in the common qualities and phenomena of matter, are clearly marked by great discrepance. Nothing illustrates this so remarkably as the power the spirit of heat possesses of separating the molecules of created matter; while the spirit of electricity as clearly holds the power of attracting and keeping together those molecules.

The effect of the spirit of heat, too, upon the materials that go to form light is most distinctly separate from that of the spirit of electricity; and this I have shewn in the analysis of the sun-beam. It is not reasonable to suppose the same spirit would enter opposite ends of the ray, and there meeting with the homogeneous material that it unites with to form the light, has the power to produce the red colour at one end, and the purple at the other. Especially when experiment has so decidedly shewn by the aid of those instruments used to detect the presence of heat and electricity, that the one is to be found at the red margin, and the other at the purple. These are phenomena so distinctly marked by their effects, that they seem clearly separated in the power of a graduated scale they observe in relation to each other,

while they do not disturb the power to act in combination.

The effect of the spirit of life upon material substances is again too remarkable to be readily confounded with any other efficient spiritual cause; and in comparing its phenomena with those that are associated with it in the complex machinery of life, we may trace the offices and powers of the spirits it regulates as of those that control it. We have here the expansive power of the spirit of heat maintaining fluidity, and so helping to bring the different substances of nature fairly under chemical action; we have the attracting power of the spirit of electricity causing the molecules both to assume a globular form, and in that form to excite motion. We have the uniting or combining power of the spirit of life causing two, three, and four substances to join in the production of one or other particular substance that cannot be imitated by the spirits of either heat or of electricity.

The difficulty there is in entertaining and supporting the opinion that immateriality has one universal identity, and is not, therefore, divisible into distinct kinds, will be found to be increased in speaking of the spirit of life upon organized matter.

Moreover, we must claim for the immortal spirit of man a distinct and separate entity, which we gather exclusively from revelation. And in contemplating this spirit alone in the case of man as it has been placed in relation to a future state of things, the Apostle Paul compares the effects of the several degrees in this

entity alone upon glorified bodies, to the difference of character in the production of various seeds and animals, when the Creator will give to this kind of entity a body "as seemeth best to Him." The immortal spirit of man, therefore, we learn will be capable of animating, in a glorified state, bodies not only of different degrees of power or spheres of comprehension, but, if we adhere closely to the analogy, of different kinds. Thus the presumed division of the spirit of man, when in a glorified state, into different orders, carries our minds further away from the idea of the universal oneness of all immaterial substances manifesting itself only by variations in degree.

Neither does physiology, so far as it relates to the manifestation of life and mind in the higher animals, through the instrumentality of the organic tissues, furnish us with any argument or proof that the spirit of electricity, for example, has any actual existence in the great channels of the brain and nerves,—those organs appropriated for the transmission of the immaterial entity of life,—though it is clearly to be detected in the chemical changes incident to the muscular electric current. Yet if electricity was the same mode of action as that of life,—that is, if they emanated from the same entity,—their immaterial causes being identical, the distinctive differences between these two spirits could not be maintained solely by the difference in the elementary materials which characterize the organization of the brain and that of the blood; for the spirit of electricity is as much required to keep together the

cerebral globules as that of life is to put the materials together by quaternary unions; but having been put together, we have the operation of the spirit of life to be brought again upon the surface, internal or external, to the cerebral tissues, before the higher phenomena of life can take place. This operation would seem to resemble those phenomena in the inorganic world produced by application of the uncombined spirits upon created bodies that have first been formed by the union of the two entities (p. 28).

But the spirit of electricity is also to be distinguished from that of life by this circumstance, viz., that while the galvanic current may be conducted away from the nerves, through the medium of the contiguous tissues, as readily as it is conducted by the nerves themselves, the spirit of life, on the contrary, is most strictly made to act through the tissues of the brain and nerves. And to insure its proper action, even through these appointed conduits, they must, for this purpose, be entire and uninterrupted in every part: whereas, a ligature tied round a nerve, or an intersected portion of that nerve having been removed, does not prevent the transmission of the galvanic electricity through this channel. The statement of Vavasseur and Beraudi, that needles passed through the nerves of living animals became magnetic, and that division of the spinal cord deprives the nerves of the power of communicating the magnetic property to the needles when so placed, is no proof that magnetism here comes through the nerves; for in this last state the inhalation of oxygen

will restore it, clearly showing that the spirit of electricity enters the vital fluid with the atmospheric air taken into the lungs; also that by this means it is that the spirit of life is conveyed into the blood in the first instance. If the wires of the galvanometer are applied to the nerve only, not the smallest deviation of the needle would be detected. When I say this, I by no means think it impossible that the spirit of electricity may not be one of the subordinate spirits employed to produce the preliminary steps that lead to nervous action; and the effects of electric tension alone upon secretion and other organic functions favours this idea. Dr. Golding Bird thinks that the existence of currents of high tension in the living body not being proved, the objection that nervous force is stopped by placing a ligature on the nerve, while electricity is not stopped, falls to the ground, as he had shown that electric currents of low tension, when applied to nerves, are stopped also by a ligature.* This may be quite possible, and the two spirits may still be very different. But in dividing a nerve, we invariably produce paralysis of the part to which that nerve was distributed; nor does the connexion of the divided ends of the nerve by means of any kind of electric conductor succeed in restoring the power of the part to which the nerve has been distributed, for neither sensation nor motion can be restored.

Nor can we compare the difference between the

* Lectures on Electricity and Galvanism.

electric and the vital phenomena to the act of charging a piece of iron with magnetic powers, by an electric current conveyed to it by a conductor, while those powers cannot be conveyed along such a conductor. The relation electricity bears to magnetism is certainly a very near one. If the phenomena of the loadstone are produced solely by electricity, as M. Ampère and others contend, then the difference in these phenomena and those of the electricity of tension is one that must receive an explanation entirely through the difference in the character and composition of the material matter so favourable to the development of the magnetic power. But before we can compare the close relation the spirit of electricity bears to that of magnetism with that relation which electricity bears to the spirit of life, it is right that we should attentively observe the very remarkable differences I have mentioned, that characterize the spirit of life. It must be acknowledged, if the spirit of life is only a modification of the spirit of electricity caused solely by the difference in the characters of the material substance with which it is in contact, then the difficulty remains to shew by what power the compounds of living bodies are put together? How are those collocations formed? for neither the spirit of heat nor that of electricity, whether acting singly or conjunctively, are able to form starch or sugar—the simple ternary compounds of vegetable bodies, still less are they able to form fibrin or albumen, the more elaborate products of animal life. And it must be remembered the power of sensation cannot

be given to any other matter but that which is built up in compounds of three and four substances united in one. These facts, I think, ought to mark distinctly the separation between the spirit of electricity and that of life.

There is another circumstance in connection with the spirit of life which is very remarkable, as shewing that this spirit is one *sui generis*. I would allude now to the apparently latent state in which the spirit of life is retained in the seeds of vegetables, whose delicate structures rapidly perish when this spirit is removed. A bulbous root taken from the hand of an Egyptian mummy, where it had been retained above two thousand years, on being planted in the earth grew rapidly.* And the celebrated mummy wheat, some of which I have now before me, having been reared from seed taken from an Egyptian mummy, must have been even older than this. There are seeds that have been dug up from depths of three hundred and sixty feet, that give the greatest reason to believe they have remained there since the Deluge, and which, when placed in favourable circumstances, began to vegetate.† Bakewell‡ states that in examining the remains of one of the large extinct herbivorous animals, from the peat bogs of America, some of the seeds, still retaining their shape and character, were found in part of the stomach of

* Journal of Roy. Inst. No. I.

† Jesse's Gleanings in Nat. Hist.

‡ Elements of Geology.

the animal, so as to give the assurance that they were alive; and that, moreover, they were the same kind of seeds as those of the plants growing upon the surface of the ground. This animal was destroyed by the Deluge, so that these seeds must have retained their vitality above four thousand years. It is the union of this spirit for so long a period of time with the corruptible and delicate material, the union of carbon, oxygen, and hydrogen, as we see them joined to form vegetable structure of the seed, without that structure yielding to decomposition, which it would more readily do than any others when the vital spirit is removed from it, that excites our astonishment that a spirit so delicate should be so long retained. Yet its specific and real presence cannot be denied, as, at the expiration of these long periods of time, if placed in a position favourable to germination, it proceeds to build up the ternary structures of vegetable bodies, which the spirit of electricity cannot accomplish.

From these and other facts it is imposible to argue that all immateriality is identical in kind, although its several sorts have such a mutual dependence upon, and connexion with, one another, as to make their separate existences, their exact number, and their relative power, questions of great intricacy.

CHAPTER VII.

THE SPIRIT OF LIFE AND THE PHENOMENA DEPENDING UPON ITS UNION WITH THE SPIRITS OF HEAT AND ELECTRICITY IN LIVING BODIES GENERALLY, AND WITH THE HIGHER SPIRITS IN MAN MORE PARTICULARLY.

I HAVE been speaking, in the last two chapters, amongst other points, of the difference that is to be observed in the unions and combinations of material bodies which have been exclusively constructed and adapted for the display of the higher spiritual substances, causing the phenomena of life and mind. It is necessary, however that a more extended notice should be taken of the phenomena resulting from these elaborate unions. For as we have seen the three spirits in operation subordinately to each other, in the building up of the vegetable and animal structures, and this subordinate and concurrent action has been marked with an apparent blending of power that made all necessary to produce the effect; so, in the introduction of yet higher spirits, is the operation of those spirits greatly subject to the organization through which they are manifested.

In animal life, ideas and thoughts, the result of mixed sensations, or of a more varied display of the abstract power of sensation, are superadded by means

of a cerebral apparatus to simple sensation which alone takes place in vegetable life. So that the distinction between the sensation of vegetable life and that which forms the basis of the mental operations of animals is apparently one of degree. And the slow and gradual increase of mental power we see always accompanying a corresponding advancement and development of the material organic instrument, will hereafter be referred to as evidence to prove that mind, as we hold it to be the display of phenomena in connexion with the organic structure of the brain, is not caused by a spirit distinct from that which is the cause of life, but is only a graduated mode of action, resulting from the application of the spirit of life to created cerebral matter after that matter has been first brought together by the same spirit in the quaternary union of the cerebral globules. This process, though of a higher order, on account of the higher spirit embarked, is allied to those phenomena I have endeavoured to show are caused by the action of the spirits of heat and electricity upon created inorganic matter that has first been united by the aid of these spirits in the original creation.

I shall not hesitate, in conformity with the plan I have pursued in this work, to draw my deductions, in endeavouring to unfold so difficult a subject, not merely from the writings of metaphysical philosophy nor from physiology only, but also from revelation. For it cannot be any longer concealed that great errors, together with the most irreconcileable inferences, have been drawn from the presumed idea that the phenomena of

life and mind are attributable to the presence of the soul; or, as I designate that immaterial substance or existence in man, the immortal spirit of man.

In taking this course, I have the opportunity afforded me of dealing with the subject on a more extended scale, of placing it in union with that knowledge which is above reason, and so of examining the subject by the comparison of facts drawn from three very different sources.

Laws of the Spirit of Life in its Union with Matter.

Mental philosophy has had its theory of animal spirits, the doctrine first propounded by Descartes, and subsequently adopted by the school of Locke. It has had its "animists," or those who considered the soul to be the fundamental cause of life, a doctrine put forth by Stahl*, and sustained with much argument and fierce discussion by his followers. It has had its iatro-mathematicians, Borelli† and Perrault, who sought to show that the laws of life were analogous to, or rather the same as, those manifested in inorganic bodies. It has had its theory of vibrations suggested by Sir Isaac Newton, and carried out in the writings of many able philosophers. It has had its phrenologists, its material and immaterial advocates. But it is not my intention to discuss these and many other theories, or to attempt to controvert them by any direct arguments

* *Theoria Medica Vera,* printed in 1708.

† *De Motu Animalium,* 4to., reprinted in 1686 at Leyden.

separately addressed to them, as many have taken this course already with more or less success; for I should by so doing unavoidably be led into much abstruse polemical discussion which is avoided by confining myself to the doctrines I have to propound, and supporting them by arguments and facts that stand or fall by their own merit. For, as all polemical discussions are rendered tedious and almost useless by the unphilosophical reflections they cast, in many instances, upon the capacity of those who happen to differ from the writer in question, I am most anxious to avoid mixing up, more than is absolutely necessary, the few observations I have to make, with the names and opinions of those who may hold a different impression.

If I mistake not, all the discrepancy of opinion in different writers on the philosophy and physiology of life and mind, and the phenomena peculiar to bodies thus endowed, is to be referred to two great points or errors, viz., 1st, the supposition that all these phenomena result from the action of the same efficient cause in all, subject to degrees of difference in the organization; and 2dly, that our perceptions and ideas have real existences. Whereas the object I have had in view has been to show that there are different efficient spiritual causes both in union with and in action upon the living tissues constituting the organization of vegetables of animals and of man: and that all those phenomena given out by these different organic bodies, are but modes of action caused by the union or amalgamation and the operation of different spiritual sub-

stances upon chiefly the gaseous, but also the alkaline and mineral elements of materiality.

With the mind so constituted, there is one very highly important distinction which marks its action in animals and in man. And this distinction, though physiologically to be discerned, is yet made immeasurably great by the assistance and assertion of revelation. In one sense, all the thoughts of each perish after they have been formed. The Psalmist, speaking of the breath of man going forth when he returns to his dust, says, "in that very day his thoughts perish*." These thoughts do not perish, in the sense of the power not to recal them, while the animal body producing them remains alive, but in the sense of their finally passing away after the body through which they are formed and transmitted, again returns to its earth.

But in the case of man, the difference is, that though the thoughts themselves perish and vanish away like the ray of light, they having no real entity of existence, yet this does not take place till the tendency and effect of those thoughts has been recorded. For revelation tells us, that the result of their combined application to good or evil is registered according to the dictates of an instrument or monitor placed for that purpose within him, the result of which will decide the future happiness or misery of his immortal soul.

The mind, as the collective operative of the intellectual and social faculties and feelings has been gene-

* Psalm cxlvi. 4: Bible translation.

rally called, has always been so much associated with certain complex operations of the cerebral and nervous system, the phenomena of which are dependent upon the same spirit which is productive of simple sensation and volition as it is of muscular irritability or motion, that it has been long a question whether that which has been termed the mind or mental principle is the same with that which is productive of the signs and phenomena of mere organic and animal life. The difficulty has been heightened on account of the general distribution of the spirit of life over the entire living creation, in many of the lower departments of which it seems, at first sight, difficult to realize ideas of what is commonly regarded as mind. Mind has accordingly been appropriated, or assigned rather, more exclusively to man, the ambiguous and conventional term, *instinct*, being applied to many similar phenomena we behold in the higher animals. This confusion has arisen from the misapprehension that what is termed the mind is an immaterial existing spirit, or, in other words, the immortal spirit of man. But this erroneous dogma has certainly no authority from revelation. If the mind is the immortal spirit, not only is the immortality of animals a question no longer problematical, but we must admit it is an uncombined spiritual existence, and this it cannot be, to be manifest to us. Neither am I aware that in the Scriptures any allusion is made to the possibility of the spiritual and immortal soul of man being capable of manifestation without a material body. It cannot show its real existence as a spirit without a

body, and when united to the present body, the *effect* only of this union is what we call mind. If this mind were immortal, we must take it to heaven or to hell. But how unreasonable is it to suppose that the reunion of man's immortal soul with the resurrection body will only be to join again the same body it quitted in separating itself from its earthy tenement! for this must be the case if our present mind is immortal. And this inconsistency is greatly increased, if we examine, as we shall presently, what the present human mind is chiefly constructed to contemplate.

Whereas the mind is only, as I shall clearly show, a mode of action dependent for its manifestation upon the immaterial spirit of life acting upon a particular organization; in the case of man, this structure is so enlarged with powers, and adapted in its organization, as to be made the instrument and temporary residence of that immortal spirit which revelation informs us God placed exclusively in him.

It is necessary, in order to prove the identity of character that subsists between the phenomena of life and those of mind, to take such a view of the subject as will admit of our recognising the same fundamental phenomena which distinguish all living bodies in every individual species. We have two such in the power of motion and that of sensation. Thus we shall find, in some form or modification, the power of motion is vested in the entire scale of the living creation. In the vegetable world we recognize the rudiments of this power. In the higher animal organizations it forms a

more conspicuous feature in their physiology. Long before we see it furnishing the higher animal bodies with attributes which, according to the particular structure, give either the power of locomotion or of other more special movements connected with the circulation of the blood, or the passage or the conversion of other fluids in the animal body, we notice a modification of this mode of action in all living bodies, which we recognize simply by its motive effects. It is not a power confined to muscular structures, even in living bodies, for there it is vested more or less in every kind of tissue, though in some it may scarcely be perceptible. But it is found to be a power also residing in bodies that are not organized; and this power is manifested in them doubtless through the spirit of electricity. As though it were a power distinguishing all living bodies from those that were without life, some writers have made the primary idea of life to consist of motion, and they thought that the inherent independent power of motion, accompanied by frequent actual appreciable motion, constitutes the whole of our notion of life. But it will be found that even automatic life could not be carried on by this quality alone; and we must therefore add to this the sentient power, however it may by so doing oblige us to connect the mental with the vital phenomena. Indeed, if either of these powers are to claim the title of primary in the sense of standing first or alone as a distinguishing mark of life, I should say sensation would demand precedence upon this ground, viz., that arguing from analogy and from facts drawn

from the inorganic world, we might at first sight be inclined to infer that the motive power, so far from being inherent in or peculiar to living bodies, and so characterising them as distinguished by this quality, was caused by the same efficient and subordinate power, the spirit of magnetic electricity, which in the hands of the Creator moves the bodies of the inorganic world and the celestial orbs throughout the universe. But we have no other bodies in the creation which make known to us that they are sensible of the presence of other bodies but those possessed by the spirit of life. That, therefore, which marks the motive power of living bodies as one of their characteristic distinctions to show the immaterial spirit in them is superior to the spirits employed to govern the inorganic world, is not so clearly made out as the power of sensation, although, when the will is found connected with the motive power in animals, it places that power in them above the more uniform and mechanical power we recognize as moving the atoms of the inorganic world. But experiments with the electric bath show that even in *living* bodies of the vegetable world the movements of their organic parts are to be referred in some degree to the spirit of electricity. Noad thinks it is not improbable electricity may have something to do with the rise of the sap, from the fact that it always increases the velocity of a fluid moving in a capillary tube.* Add to this, that living vegetables are the most powerful

* Lectures on Electricity, p. 73.

conductors of this spirit with which we are acquainted. Moreover, we must contend that the movements in animals are to be referred to this spirit, for the functions supplied by the sympathetic ganglia have been closely imitated by galvanic power, as in the experiments of Wilson Philip;* and the same nerves we trace into the structure of the elective apparatus of the *raia torpedo* are the same in character with those employed for the purposes of digestion and secretion; and these functions were found by Dr. Davy † to have been arrested by the frequent discharges artificially excited in that animal. Now these phenomena are certainly more allied to the motive power than to the sentient. And there are physiological and anatomical reasons to suppose that the ganglionic system is designed, both in man and animals, for those primary operations, if we may so call the organic offices of secretion, nutrition, digestion, circulation, and the like. After they have contributed their share in the constructon of proper organic parts, such as a brain and nervous system, we observe for the first time the phenomena of voluntary motion and sensation to result from the action of those additional portions of the living body on which the spirit of life is brought to bear.

The power of sensation is a mode of action found exclusively in bodies endued with the spirit of life. It is, therefore, very rightly presumed that it is a power pre-eminently marking the presence of a spirit

* Experimental Enquiry into the Laws of the Vital Functions.

† Phil. Transactions, Pt. II. 1832.

not to be detected in inorganic bodies. The different degrees of this mode of action, if we trace it up from the lowest forms of vegetable life to the highest organization in man, will be found to be so great, that we almost lose sight of the fundamental and abstract character of this mode of action, which every living body enjoys in common, of being able to detect the contact of other matter when applied to it, and of which all the higher properties we notice in man, comprehended in the desires, the feelings, the thoughts, and all the high attributes of the mind, are only the more elaborate examples of its modifications,

Being immaterial in its nature, this spirit, like those below it, must come in contact not only with some kind of body, but with some particular kind of matter, before that organic structure—the living animal body—can be built up so as to perform either vital or mental phenomena.

It was the opinion of Aristotle that anything that feels and moves voluntarily is endowed with mind. "As soon as they feel, they must have thoughts and desires, for where there is sensation there must be pain and pleasure, and where these exist, desires must exist likewise." And the proof of the correctness of this opinion ought to rest not upon that particular degree of complexity which may be arbitrarily fixed as the limit or standard of mental endowment, but upon the true fundamental nature of the power of which the mind in the higher animals, but more particularly in man, is the most complex form.

Progressive Development of the Material Structures as the Vital and Mental Powers increase.

There is much reason to believe, although it is not actually demonstrable to the eye of sense, that every living animal substance is possessed of a material organic structure which we recognise in the higher animals, as the nervous system, through which they manifest sensation and motion, appetites, desires, and will. Tiedemann says: "The infusoria, polypi, medusæ, various zoophytes, and the majority of entozoa, are the only animals in which we have not yet succeeded in shewing the existence of nerves by the anatomical scalpel. But as we perceive in these animals phenomena which take place by the medium of nerves, in animals of a more elevated order,—that is to say, sensibility and voluntary motion,—it is not improbable that in them the nervous substance is mixed with their gelatinous and nervous mass without being demonstrable as a particular tissue."* However this may be, it is certain that in man and the higher animals, a particular system or structure, varied and complex in its character, is formed expressly for the display and operation of the phenomena of sensation, voluntary motion, and the higher qualities of mind in them.

When no such system of brain and nerves is to be discovered there, it is contended there is no manifestation of those phenomena that constitute mind. And

* Comparative Physiology: translated by Gully and Lane.

the presence of the organizing action alone in plants is thought to be owing to the deficiency in them of a nervous system capable of manifesting mind. But even the unconscious spirit of life, it must be admitted, gives the theme of the instincts, and though we define mind to consist chiefly in the distinguishing qualities of consciousness and thought, yet this leaves the question of the true origin of mind to be determined by the spirit of life.

The organizing or vital spirit in plants may explain the reason why the more succulent kinds grow in marshy places, or why, in desert countries, the power of transudation is so much slower than that of absorption. The consciousness of the necessity of these laws seems to have been antecedently acted upon by the Creator; and as there is no organization indicative of mind in the vegetable kingdom, such phenomena are accounted purely organic. But what must we say in the case of some of the lower tribes of the animal creation; of those animals without brains, the acephalous mollusca for example, which have mere nervous ganglia around the stomach? Yet the intellectual acts, instinctive as they are called, of these animals show that there is an acting in relation to a particular position of things which makes it impossible to suppose they were not in some way sentiently informed of that position. If it is mere conscious sensation, this is enough to constitute the basis on which the more elaborate reasoning mind is formed. It is not likely that the immaterial substance causing the phenomena

of life, among which we observe sensation and motion, should reside exclusively in the brain or the spinal chord. There is much to prove it existed in the sympathetic ganglia and the delicate network of nervous matter connected with them, before the brain and cord was built up. In this way it probably presides over the spirits of heat and electricity as they act upon the different and numerous substances in the blood; for it has been shown that the manifestation of thought through the brain is strictly dependent upon the quantity and quality of the blood supplied to that organ. So that, although the phenomena of the spirit of life which form the basis of mind, viz., the different modifications of sensation and motion, are inseparable from the brain and the nerves, and the ganglionic system, it does not therefore follow that the immaterial substance causing the phenomena are separate and distinct from that which causes the mental phenomena, or that sensation and voluntary motion, which form the basis of mind, are any other than the spirit of life acting upon particular combinations of organized matter. Still less does the physiological fact, that sensation and motion, the two fundamental elements of mind, are seated in the cord, and not in the brain, help us to infer that the mind has an independent entity of existence, being manifested through the brain alone. For the phenomena of mind are quite incompatible with any separation of the spinal cord from the brain. If, therefore, the mind were the immortal soul, this latter spirit must reside in the cord as well as in the brain. Thus,

the phenomena of life and mind are, in a material sense, limited to the organization through which they are manifested in living bodies: so that the circumstance that appears to mark the difference between this spirit of life in man and animals is the limitation in the organization of every distinct species to a certain fixed boundary, beyond which it cannot pass. That it has, as a spirit, power to do more were the organization prepared for it, is forcibly elucidated by the common instrument invented to increase the sphere of vision. That organic part of the body that enables us to behold objects at a distance is confined to certain bounds, which vary in every animal according to the magnitude and perfection of the instrument, beyond which it cannot extend. Yet if by art we so contrive to imitate that instrument, as we do in our telescopes, upon a scale of increased proportions, we are enabled to behold objects at a distance almost immeasurable. And it is with no more mind, no more additional supply of the immateriality of life, that the optic nerve is able to transmit as much power as we can find instruments to convey it.

The office of this spirit in every species, which seems to have been fixed by a Divine and unalterable law at the beginning of the creation, is to charge the materials brought together, assimilated and united as they are in the operations of the chylopoietic viscera, with such power as that they may continually repair and build up those parts which otherwise would be destroyed by the different processes going on of chemical change and decomposition. It thus furnishes and controls, in every

organ of the body, the several powers of secretion, formation, and growth, in the accomplishment of which it engages the spirits of heat and electricity. In the carrying out of the phenomena of muscular motion, we also have the most satisfactory evidence that the spirit of electricity is subordinately engaged, and that independently of the nervous system, to produce the muscular electric current.

In this way the particular organization of every species of animal is built up by the aid of this immaterial substance, and in this operation, amongst other parts, a brain and nervous system is constructed in each, more or less complicated and enlarged according to the mental development required. And the building up of this apparatus for the manifestation of the mental operations is likewise accomplished in a great measure through the agency of the spirits of heat and electricity which are here held bound by the higher spirit of life to contribute their specific powers.

Physiologists have not failed to notice that the operations of life were dependent upon the action of external agents, and the theory of John Brown was set up to try to prove that life was the result of the operation of external agents upon organization that possessed peculiar inherent qualities he called irritability. How confused the mind must have been, as to the distinct nature of the efficient cause of life being a distinct spiritual entity, is at at once shown by observing how these physiologists, one and all, have mixed up in the most unsatisfactory manner the different material and

immaterial substances, comprehending them all under the same category as external agents; such as heat, electricity, water, light, oxygen, and the like. It is impossible to jumble together all these substances, some of which are simple, others combined material substances, while others, again, are altogether immaterial in their nature, without producing the most contradictory and obscure notions of the true efficient cause of life. For, as I have before remarked, the spirit of life has the power of holding and connecting all these inferior agents in such a manner as to convince us it has power to command them into obedience and order, making use of them as the circumstances may be up to a certain point, and under certain conditions, and binding them down to certain modifications of action to which they do not submit in inorganic nature.

The organization of the brain being fixed in the number and size of its various parts, transmits the mental phenomena accordingly in a more or less elaborate manner. This certainly favours the idea that if there is any difference in the immaterial cause of the vital and mental phenomena of animals, it is only a difference of degree in the organic parts; for the one is so intimately mixed up with, and dependent upon the other, they are so essentially the same in some of their effects, while they are in operation so inseparable, that they cannot be said to have two distinct spirits for their origin. Indeed, if we separate mind from life in its true efficient cause, we may with as much reason separate the efficient cause of motion and sensation.

For there is quite as much difference between the function of digestion and that of motion, as there is between the function of digestion and that of sensation, —as sensation, after all, is the basis of mind, and it is as inseparable from digestion as motion is; while they both only cooperate with that power which separates the materials in digestion, furnished by the spirit of life to the sympathetic ganglion.

The spirit causing the phenomena we call mind must be indivisible, because it is not matter. Before mind can be the result of its operation upon particular organization, it must unite the elements first in the binary and quaternary unions, and so build up organic bodies. In that state it is capable of acting upon, in particular, structure so built up, and the phenomena of mind are the consequence of its higher action upon this particular structure. And as it finds this instrument constructed and adapted so does it act. If there are capacious cerebral arrangements it can do more than if those arrangements are upon a smaller and more contracted scale.

The supporters of the theory of a vital *principle*, as it was called, spoke of it merely as an occult *quality*, and thus they were unable to account for the great diversity in the mode of action of living bodies. They therefore called to their assistance a spiritual power in addition, which they called the soul, and, by adding this to the vital principle, they endeavoured to account for the intellectual phenomena. How, in this way, can we get over the difficulty in the case of most of the

animal creation, where some degree of intellectual operation must be allowed? In animals we notice mental phenomena which decide without a doubt that they possess a power of perception, of memory, of judgment, of will, of attention; that they have thoughts and desires and mental operations, allied in character, so far as they go, to those in man. Moreover, the chemical analysis of the cerebral matter in animals shows that the phenomena of mind in all must proceed from the operation of a similar spirit; for there is no material difference in the component material elements.

If, therefore, it is considered that two separate spirits, in addition to those of heat and electricity, are supplied to perform the vital and mental operations in man, physiology and, as I shall presently show, revelation, require the same spirits in animals. How otherwise can we account for the many wonderful acts and mental phenomena in animals, as much indicative of thought as the most rational acts of man? We may even say more than this, for the intellectual acts of some of the higher animals imply, in many instances, that the mental process in them is one in some respects much nearer to what we should call perfection, than the corresponding operation employed in the case of man. This is to say nothing of the controlling or directing effect of a still higher spirit in man which may be connected with his moral condition, and be added to the mental causes operating in him more exclusively. I speak merely of the mental phenomena to be observed in animals.

With all the aid of his increased intellectual power in the enlarged complexity of his several parts, and the addition of a corresponding extension of power in the great attributes of reason, perception, comparison, memory, and the like, man is unable to reach the same amount of intelligence upon some mechanical points that we see animals have arrived at. Who would suppose that many sea-birds, and even fishes, had discovered a mental method of finding the longitude? yet, however incapable we are of doing the same, by a similar mental process, it must be admitted this power is as much a mental operation performed by animals with the same immaterial spirit which furnishes to them the formative, the nutritive, or the reproductive powers they possess.

But we will take another argument to shew that the spirit of life is that which causes the groundwork, as it were, of the mental operations throughout the entire living creation; and this we shall draw from the notice it receives from the Scriptures, and the general character of the mental faculties, as they apply to the whole animal creation.

It is a point of great importance to determine whether the mind, which includes the whole aggregate of the intellectual faculties, sentiments, feelings, and propensities, has any real existence as an entity, or not. And this importance is increased as we go on, for it will be for our consideration to determine whether the mind has not been appointed in man to be the common machinery on which not only his immortal spirit is

brought to bear, but also the Holy Spirit as well as the spirits of fallen angels.

The Spirit of Life common to all Creatures proved from Revelation.

Let us now turn to revelation for further evidence to show that the spirit of life is one quite independent of the spirit of man, which will be for our consideration in a subsequent chapter. There are doubtless many passages here to prove that one common spirit governs the entire living creation, in that sense that will not admit of separating the mental and vital phenomena in animals.

First, God is represented in some passages as sending forth his Spirit, by which means the whole organic creation was made to live. "Thou sendest forth thy Spirit, they are created."* And that this spirit is created we may infer from Isaiah,† where God says, that if he were to contend for ever, "the spirits should fail before Him, and the souls which He had made;" thereby implying, not only that the bodily parts, here rendered souls, were in His power, but also the spirits which animated them. Again, He says in Job, "if He gather unto himself His Spirit and His breath, all flesh shall perish together."§ Here the breath and the spirit are mentioned separately in the same passage, although in connection, as if to show that the breath,

* Psalm civ. 30. † Lvii. 16. ‡ Job xxxiv. 14, 15.

while it was different from that spirit, was nevertheless made the vehicle for its conveyance into the body. And this corresponds with the natural phenomena of other immaterial substances which everywhere exist in the atmosphere, and are taken into the lungs for the purposes of the animal economy, together with the proximate principles of material matter,—oxygen, hydrogen, &c.

In this way the spirit of electricity is taken into the body together with the spirit of heat; for it is not physiologically correct to say that heat can be *generated* by the simple conjunction of the oxygen of the air with the carbon of the blood, without the co-operation of any other agent. And this agent is doubtless of a spiritual nature; in confirmation of which fact, the experiments of Matteucci * are very satisfactory. For in a great number of instances he proved the intensity of the muscular current, which is purely electric, to be proportionate to the activity of respiration, as well as to the rank of the animal in the scale of creation.

That the spirit of life in like manner comes into the living body, or has free and constant communication with the organic parts, through the breath, as it is stated in revelation, is in accordance with the most reasonable supposition.

In other parts of revelation, God is stated to be the great Cause of this spirit. Job says, "in whose hand is the life of every living thing, and the breath of all

* On the Electro-physiological Phenomena of Animals.

mankind."* And, when Moses and Aaron interceded for the people in the matter of Korah, they begin their prayer in these words: "O God, the God of the spirits of all flesh,"† &c. And, when Joshua was appointed to succeed Moses, we find the latter calling the Lord "the God of the spirits of all flesh."‡ The Apostle Paul calls God "the Father of spirits;"§ and in other places he is represented as the Lord that formed the spirits of all.

Here, then, the whole living creation is represented as having bodies alike animated by the same spirit, which bodies perish by its withdrawal; and, when this takes place, man's body, in common with that of the brutes, "returns to the earth, and that very day all his thoughts perish." Now his spiritual and immortal soul does not perish, though there is no doubt, by this text, that his thoughts do; and this ought to be sufficient conviction that the thoughts have no real existence as entities at all, but are only modes of action; and, as these are similar to the corresponding phenomena in animals, they are doubtless the result of the spirit of life. Solomon says, when the silver cord is loosed or the golden bowl is broken, "the spirit shall return to God who gave it." The silver cord and the golden bowl, which are high poetical expressions, pointing to the nerves or the spinal cord, and the brain, are so united in this text, that, if the spirit which returns to God is here meant

* Chap. xii. 10.
† Numb. xvi. 22.
‡ Numb. xxvii. 16.
§ Heb. xii. 9.

to be the spirit of man exclusively, it must be associated with the spirit of life; for the silver cord is no other than the nerves, and these do not imply in all cases the presence of the spirit of man.

In another place he says, "that which befalleth the sons of men befalleth beasts, even one thing befalleth them; as the one dieth, so dieth the other; yea they have all one breath, so that a man hath no pre-eminence above a beast;" viz. in this respect,—"all go unto one place; all are of the dust, and all turn to dust again." The identity of the spirit of life in man and animals is here made very obvious; and, if it is associated with the phenomena of mind in them, as we see it is, there seems no alternative but to admit either that there are two spirits in animals besides those of heat and electricity, as we shall presently see there are in man, or else the mental and the vital spirits are synonymous: moreover, that this breath or spirit of life is not in man different from that of beasts, seems clear; for, as a vivifying cause, it is spoken of in the Scriptures as common to all living creatures. "All flesh in which is the breath of life, died,"* was the fulfilment of the sentence passed upon everything that had life at the period of the Deluge. And the Apostle Paul, in his address to the Athenian philosophers, says, God "giveth to all life and breath, and all things."†

* Gen. vi. 17. † Acts, xvii. 25.

General Characters of the Mental Operations performed by the Spirit of Life in Animals, compared with the Mental Operations in Man.

If we analyse the different parts or properties of what is called mind, whether in man or in animals, we shall find it to be composed of certain powers and qualities, which, in the aggregate, are comprehended in the term mind. But that this is neither the spirit of life, nor the immortal spirit of man, will appear the more obvious if we take the several mental attributes, alike in animals as in man, and endeavour to ascertain their qualities, or the objects to which they relate.

In contemplating what we call the mind, in animals and in man, we discover it to be composed, first, of a series or collection of faculties intended to give certain and distinct information as to the nature and the uses of objects around us. These faculties relate entirely to the objects of the physical world around the living being that beholds them. With the assistance of certain *attributes*, presently to be mentioned, these faculties inform the living creature what are the qualities, characters, shapes, uses, &c., of every material substance that comes within their ken; so that they may be adopted or avoided as they present to the mind qualities or characters that may be either beneficial or injurious to them. When placed under the influence of a higher and more discerning spirit, these same faculties are enabled to embrace the mathematics, and

to discriminate and affix certain signs and particular sounds, as they are comprehended in artificial language.

There are provided in this mental machinery, also, another set of faculties, or, as they are termed, feelings, which in animals are made subservient to the conservation and continuance of the species, so that one species may bear a proper relation to the others, and fulfil their destinies as they relate to the order and compatibility of the present existence. In man these feelings are not only made to point to the welfare and continuance of the present state of things, but also they are, by the agency of a higher and different spirit, made applicable to what is called the moral world, and the existence of things yet future, that relate to a higher state of social and divine perfection, where the acts of justice, mercy, and truth, will form the essential elements of a state of perfection.

Over these two very different kinds of faculties of the mind are set certain qualities, or, as I have termed them, attributes; such are, perception, attention, comparison, memory, prescience, will, conscience; and these attributes are more or less present in different animals, and are individually strong or weak according to the condition or amount of cerebral matter employed in the carrying out of the different faculties spoken of above. And they probably all, when present in the particular mind, are engaged, or capable of being applied individually and collectively, in the ordinary exercise of the mind.

This complex machinery is, then, composed of powers representing the true condition of the material world which our outward senses behold, and also of powers representing in animals the true relation they bear to each other as denizens of this earth; while in man it is composed of powers which relate to an invisible world and a higher order of things, where justice, benevolence, and all that is comprehended in love to the Creator, are centred.

All this is the result of a highly complicated mode of action, which in man we see is made subservient to the high aspirations of his immortal soul. But the very fact that these different applications of the same mode of action, in the operations of the mind,—some dealing with material and visible substances, while others treat with a state of existence in no respect resembling the things that are seen,—are combinations of two very different effects, arising from the union of causes totally different in their nature as material and immaterial causes must be, shows that the mind is no other than a compound mode of action, the effect of the spirit of life upon cerebral matter, whereby the sensible characters and difference of all material objects can be estimated; and in man, of the added spirits, of man, of that of evil, and of the Holy spirit, upon the same cerebral matter, whereby the existence of an immaterial world is implied, and the contingent rules to be observed by him for avoiding certain actions, the tendency of which in him are regarded by the Creator as sinful, or for following certain actions which on the

other hand, are regarded by the same Being as not sinful.

The comparison of the faculties as well as the attributes of the mind in animals with that of man will further instruct us that the difference is not exactly one of degree, but one arising out of the application of new and superadded spirits to that of man, to receive the dictates of which he has clearly attributes we call *conscience*, and one that may be termed *prescience*, that are not to be traced in the mind of animals. These attributes take a range over the entire mental constitution of man, and have, as it were, a voice not only in the exercise of every desire or feeling, but also of every faculty which we more exclusively regard as intellectual.

The bare proof of the existence of faculties and feelings in animals which resemble so closely as they do the same powers in man; that they are further guided and overruled by certain qualities, which I distinguish by the term attributes, which attributes have, as far as they go, a similar mode of operation as in man; and that, moreover, the instrument in both for carrying out this machinery is chemically composed of the same kind of corporeal and elementary molecules, varying only in size or shape, ought to place the question of the mind of man being his immortal soul, for ever at rest, as untenable and contradicted by the most obvious facts.

The mental operations in animals are necessarily restricted to the contemplation of circumstances and

things relating only to the physical world; nevertheless, for the carrying out of these ends, the faculties and feelings, alike in them as in man, so far as they go, are superintended by the same kind of attributes we behold in man; and the free interchange of these their mental operations, are, so far as they go, quite as unequivocal and easy to be recognized in the one as in the other.

The confounding of these faculties with their attributes or qualities of action in the writings of mental philosophers, as they relate more exclusively to man, is not to be mistaken, although it is to be deplored, seeing it has led to such confusion in the nomenclature of psychological science, and such very obscure and unsatisfactory disputes about words that have no representative in the mind as distinct faculties. But when this observation is extended to the science of deontology, the confusion to be traced to its result here is most striking.

It must be also borne in mind that in writing upon moral science more especially, the definitions of deontology must be in obedience to the use and not the abuse of that part of the mind which sin has in a more especial manner stamped with the curse of an offended God.

It has been shown that mind, whether in man or in animals, cannot be an entity, and as it is the medium through which all our ideas, both of visible and invisible things are formed,—the stage, as it were, on which all the operations resulting from the action and influ-

ence of the spirits that take up their abode there, are carried on,—it is necessary that a more detailed description of its phenomena and mode of action should be given before we go on to speak of those spirits that exercise control over its functions,—the spirit of man, the spirit of the devil, and the Holy Spirit of God.

CHAPTER VIII.

THE MIND.

The Intellectual Faculties and Social Feelings.

If there is one part of God's creation more wonder-striking than another, it is that elaborate operation of spirit upon matter in the production of the phenomena of mind.

As light has been shown to result from the application of spiritual substance to inorganic created matter, and is of itself, therefore, only a mode of action, so, also, is the mind. Nor can it exist as mind in an immaterial state alone.

But the difference in the union of spirit with matter for the production of light is more simple than that which takes place for the production of mind. Here both the material and the immaterial substances engaged are each more compounded and mysteriously wrought, and the effect that might be naturally supposed to follow such an union is consequently more complex, and in some respects inscrutable.

It will be necessary to take a more detailed notice of the mental constitution, that we may be able to trace to their true source in that astonishing piece of divine

mechanism, the different motives or emotions, feelings, intellectual principles, &c., as well as the powers and functions or method of action which it displays.

The purpose to be accomplished in the formation of the mind is fulfilled when the various objects of creation in the outward and visible world have been so depicted to the individual, whether animal or man, as to assure him of all their qualities, uses, shapes, colours, and proportions, according to the necessity of the case. These objects may be divided into two very distinct and different classes: the inanimate, or those not possessed of the spirit of life, called also inorganic; and the animate or organic, or those in which this spirit resides. It is, consequently, the office of the mind, not only to treat with those inanimate objects around in relation to their use and benefit, or their abuse and detriment to us, but also to treat with animate objects which are placed upon the earth to fill up their several social positions there, and to estimate the several relations all these bear to each other, and to act in conformity to the intelligence this furnishes to the individual. It was accordingly necessary that the mind should be appointed to treat both with the inorganic materials of the globe, to ascertain their nature and uses, and to apply them to the purposes for which they are required; and that it should also be so arranged as to be able to comprehend the relative position, value, use, and end, the different creatures fulfil towards each other, as well as the support, defence, and regard, they owe to themselves. This calls for a very wide display

of instrumental arrangement in the general conformation of the mental constitution, which may, in treating with subjects and objects so different, be able to bring the whole or any part within the compass of one connected view.

It is certain that, to deal with objects so very different as are those we distinguish by animate and inanimate, a very opposite and independent kind of mental faculty is necessary; and that the value and relation, qualities and uses, of inorganic matter, would be ascertained by a mental process very different from that required to treat with living beings. By these they are enabled to exercise those social and reciprocal feelings which permit them to dwell compatibly together in their respective spheres, so that they are drawn together in a community of interests, and enabled to judge of the advantage or the disadvantage to be derived from the exercise of those feelings which delight the senses, or lead to actions either beneficial or injurious to themselves or others.

If any thing can prove that the mind, though an immaterial phenomenon, is not really the spirit of animals or of man, it must be the fact that both its intellectual as well as its social or its moral phenomena are all made to treat with and contemplate bodies, whether inanimate or animate, whose material or organic parts, as the case may be, are put together for the purpose of fulfilling those ends which relate to the conservation of this physical world, and the creatures that dwell here. And, whatever the event may be in

the case of man, as he stands related to an eternal world, it is certain that the scene and exercise, or trial, of his bodily and mental powers is laid in this present state of things, to which his mind bears in every part the closest temporary relation.

To be capable, feelingly and undoubtedly, of recognising many outward forms of existing things, it was necessary that some general power of sensation should form part of the elementary fabric of the mind. To this was required to be added, the aid of some other fundamental property which should be able to excite to action, and so give motion, as it were, to the machinery; and, upon these bases, as I endeavoured to show in the last chapter, are constructed all the various and modified kinds of sensation and motive intelligence we observe in the formation of the different faculties and feelings.

That which may be regarded as the most distinguishing characteristic of the intellectual faculties, is the power they possess to treat with objects we can either see, hear, smell, taste, or feel. They are the true internal sensible pictures by which the realities of the outward world are recognised by the mind, the outward senses being the instruments of conveyance.

And the feelings, desires, and sentiments, have a like fundamental origin in the common sensation, modified in such a manner as to adapt them to purposes which, in animals, relate to their social position and comfort; and in man to a future condition of things, in connexion with which he is placed by the

Creator under peculiar conditions. Thus constituted, we have an intellectual mind, so adapted as to be able to comprehend all natural knowledge relating to the characters, forms, colours, sizes, uses, adaptations, and properties, of all matter. And we have a social mind so adapted as to be able to comprehend all natural knowledge relating to the interests of ourselves as living beings, or of others, so far as concerns their enjoyment and preservation, or their misery and destruction.

In speaking, in a former chapter, of the power the spirit of electricity possessed of regulating the form, size, colour, shape, &c., of bodies in the inorganic world, I was anxious to show that these were qualities resulting from the union of this spirit with simple material substances. In the operation of the mind, these several qualities are required to be identified and made known to the individual; to do which it was indispensably necessary that the same immaterial and material substances should be incorporated into the material organ before the higher spirit of life can be brought to bear upon that organization in producing those recognizing phenomena that constitute our ordinary ideas of things. Hence the importance of engaging the spirits that are subordinate to that of life, before the functions of the brain can be brought into operation.

The social mind, or rather the social portion of the mind, will presently be shewn to be made up of a more mixed and elaborate mental operation than that of the bare intellect. And this is very important to

point out, for when ethical writers talk of this portion of the mind, which, in animals, supplies the social feelings, and in man the moral sense, they seem to regard it as a mere modification of intellect; whereas, while it is impossible to contemplate it in operation apart from the intellectual faculties, it is a portion of the mind in it itself quite distinct. Neither is it necessary, in calling in the intellectual faculties to explain the true theory of morals, that we should make that theory, as some have done, to rest upon merely intellectual principles.

It is necessary to dwell on this functional division of the mind more at large, for it has never before been advocated by writers on mental and moral philosophy; and there is much argument to prove its correctness. We have a state of things in the physical world that points by analogy to this gradation in the phenomena and operations of the mind. We have, for example, found that the phenomena of life are mediately carried out by an organic combination of materials, first brought together by threes, as we find them by analyses in the vegetable world. And the bringing together of similar substances by unions of fours, as we beheld them in the higher animal structures, is only to be accomplished through the instrumentality of the ternary compounds of vegetable life when added to the more intricate compounds of animal productions. Sugar and starch have their use as ternary compounds of oxygen, hydrogen, and carbon; but they must be united or associated with gluten, albumen, fibrin, and

the like quaternary substances, which are compounds of the three elements above named, to which is added that of nitrogen, before the animal tissues can be formed even in living bodies. And in like manner the intellectual phenomena of mind, as they are brought to bear simply upon the uses, forms, colours, and other qualities of simple unvitalized matter we behold in the inorganic world, have need of no other power than that by which such things may be depicted to the mind aided by the ordinary acting process.

But when we have occasion to regard man and the living beings that were created with him, whose organizations betray evidences of still higher and more exalted creative powers, in the several social relations they bear towards each other as parts or links of one great and connected chain of reciprocal and dependent interests; or when we regard man in the relation he bears to his fellow-man and to his God, as a moral and responsible being, having a clear knowledge of what is good in the more extended sense of the divine perfection, it must be obvious that to attain to such a knowledge a far more complex and elevated mental process must take place, which has not only a knowledge of the characters, uses, and relations of the inorganic world, but also of those characters, uses, and relations which are affixed to the still higher organic structures possessed with life. The social and the moral mind, as these higher feelings are displayed in animals or in man, is, therefore, a more elaborate process than the mere intellectual; and to effect its

operation the simple or compounded ideas of inorganic matter must be brought to the assistance, and added to the social or the moral part, before the still more elaborate mental result can furnish us with the true characters, properties, uses, and relations of the living world. This is the only true foundation on which a mental theory of morals can be erected.

Distinction between the Attributes of the Mind and the Intellectual Faculties and Social Feelings.

We will now suppose the mind to be put together with that regard to things and persons which will admit of its most accurate adaptation to the varied circumstances that surround it. The machinery of which it may be said to be made up, such as the faculties and feelings, must be regarded in a distinct and separate light from the different moving powers or methods of working which it adopts for the carrying out its ends, and for the obtaining of right and permanent impressions of the true state of things and beings. While, therefore, the faculties and feelings would appear to proceed from the sentient, the moving power seems reasonably to be given to it through the instrumentality I am about to speak of.

The mode in which the intellectual faculties and social feelings work is obviously different from, and in some measure independent of, their innate constituent powers to receive or to picture the form, action, use, or other qualities of bodies, either organic or inorganic. I would, therefore, distinguish the different modes of

working or of action, the moving powers of the mind, by the title of ATTRIBUTES. And such are *attention, perception, memory, comparison, will, &c.* To these attributes, common to all creatures, should be added in man those of *prescience* and *conscience.* By that of prescience the human mind is able to anticipate and to comprehend those events yet future which the ordinary physical laws lead him to infer do proceed from natural causes, as well as those events which revelation has communicated to him relative to things yet future. This is an attribute which we shall presently see when acted on by the spirit of evil, which is a fallen angelic spirit permitted, for inscrutable reasons, to take possession of this very mind and all its machinery under certain circumstances, is able to give the person so acted on a knowledge of the future which does not bear any connexion with the ordinary physical laws, *and also a power of being present in the thoughts of others,* a power which certainly does not belong to the spirit of life or the spirit of man to impart.

By the attribute of conscience, the spirit of man which is in him is enabled to know the right and the wrong tendency, the good and the bad consequence of actions, and the ought and the ought not of those actions as they stand approved or condemned by the law which is written in his heart.

We cannot fail to notice these attributes in man, while in animals they are not present. They are placed in man that he may be able to exercise that wonderful power of reason which he possesses, and

which enables him to draw inferences from events yet future. The power of the conscience to *discern good and evil* was not given at the creation to man. It was after the fall that this attribute underwent its present change, through the power of the spirit of evil.

Prescience stands in the same useful relation to things and events that are to take place, as memory does to those that have taken place. They both bring the subject, the one from the future, the other from the past, in order to bear upon the present. The meaning of this attribute in man is not to be received in the unlimited sense it bears in relation to the Divine Being. It is greatly restricted in this sense, and is provided to instruct him through natural agents, so far as they are calculated, by their unalterable laws, to do so, what is to take place in future in connexion with those natural bodies, and giving him moreover that power he possesses in the operation of his social or moral mind that teaches him to comprehend all that he knows from astronomical and other physical sciences of the certainty, the greatness, and the wisdom of Divine power; and, when aided by revelation, of the real existence of God, and the unalterable truth of those events which relate to his immortal state. It is by the instrumentality and superaddition of this attribute to all the others, when acting upon the faculties and feelings, that the Holy Spirit produces faith, hope, and love to God in the believer.

The difference between what is called instinct in ani-

mals and reasoning in man depends entirely upon the fact of the number of these attributes of the mind in the latter being added to by these attributes of prescience and conscience, and so being numerically greater than they are in the former. The intellectual, as well as the social faculties in animals, are indeed in some points even stronger than they are in man, and have the power in them to perform particular acts which imply a deeper and larger condition of the fundamental faculty producing them, although in them the same number of attributes cannot be brought to bear upon the subject. The mental faculty employed in particular cases may in the one be as great as the other, or it may be even greater in animals. But the mental gestation or operation in animals is carried on by means more circumscribed: in other words, their attributes are fewer. This may be elucidated by showing that in them there is no attribute we really term prescience or forethought. The mental process which enables them to do what would imply in us a knowledge of the future is in them carried on by the attributes of attention, perception, memory, comparison, and will. These attributes may lead to acts that anticipate the future, but they cannot do so rationally without the aid of the prescient attribute which they do not possess. Hence animals act by motives that lead or compel them to do things that are made subservient to the ends of their social condition, but which ends are unknown to them, they having no attribute by which they can know them as events yet future to them. Neither can they know them in the

sense of right and wrong, or even in the sense of good and bad, as those signs are applied to actions essentially connected with their social state, both individually and collectively. But the mental operation that takes place so that they may act according to circumstances which lead to their benefit or their injury is an operation effected simply by the aid of the attributes of attention, memory, and comparison, acting upon stronger feelings. Thus, an animal will avoid that food that is noxious, not because it knows the future consequences of again partaking of it, but simply because its attention, memory, and judgment, apprize it of the former effects the noxious food had upon it. Thus, also, a bird will build a nest by the aid of a strong innate faculty, which act is made to bear a relation to events yet future, which the animal has no attribute to inform it of, although those events bear a correct relation to the act it is performing. The power to find the longitude which many sea-birds possess, if it were moved by the high attributes of man, would be a more wonderful power than any he possessed. But it acts irrespective of prescience, and is effected through the agency of those attributes I have named.

It may, therefore, be affirmed that the presence of these attributes of prescience and conscience in man marks distinctly the strong rational probability which revelation so unmistakeably affirms,—viz. that in the operation and working of his mind, a yet higher spiritual entity, called there the spirit of man, is placed in him, with aspirations, hopes, responsibilities, and

fears, which bear a relation to a still more exalted and more perfect state.

But having stated my belief that the mind is worked by the agency of powers or attributes that are independent of the faculties and feelings, it will be more satisfactory to shew on what proofs the existence of these attributes rest.

Their true distinguishing characteristics are—

1st. That they have qualities of action that cannot be compared to or recognised by any outward bodies around.

2dly. That they have a range, or distribution, over the entire faculties and feelings.

3dly. That while the intellectual mind seems by the aid of these attributes to be able to act alone, the social mind or feelings appear to require the intellectual faculties to be added to them before the operations of the attributes can be brought to bear upon them.

4thly. While the individual faculties may be engaged separately, they cannot act without the combined operation of the attributes.

1st. The qualities of the attributes are incapable of being compared with any objects of sense in the outward world. All the *faculties* are named and identified by the characters they represent in the outward world. Form, size, number, colour, as they are represented in the mind, have their synonymes in nature, and are in strict relation to the natural characters and adaptations which obtain in the outward world, and are

attached to all visible bodies. It is not so with the *attributes,* which produce phenomena that admit of no comparison or similitude. They would, therefore, seem to resemble more the act of a pure spirit upon created organized matter, as we see the spirit of electricity acts upon the surfaces of created bodies in the inorganic world.

In the case of memory, how remarkable is that power by which we jump back instantaneously to the events of our childhood, while we call up scenes of material objects, or thoughts that relate to the acts of our fellow-creatures in times long past. In this respect it resembles the phenomena caused by the spirit of electricity as it acts upon the wire of the electric telegraph (apparently) regardless of time or space; so does the thought, when aided by the attribute of memory, jump back to the period of youth, or, when the attribute of prescience is added, forward to the imagined future, when thousands of years, if time should be then, shall have passed away, with the same synchronous effort with which we contemplate the events of the last hour.

All the attributes are perfectly unique in their action; and though we can compare them to nothing we see around us in the matter of the world, yet are they plainly to be distinguished from each other. And the manner in which these attributes appear to act, as it were, independently of time and space, shows plainly that they are the immediate effect of spirit and not of matter.

2dly. They have a general range or distribution over the entire faculties and feelings. To prove this, we have only to assure ourselves that we cannot form a true idea of a colour, or a figure, or a note in music, without exercising all these attributes upon it. Neither can we have a true idea of what is due to ourselves or to others around us, without making use of these attributes. Before we can make up our minds that a colour is red, we must first be able to concentrate the attention upon it; we must remember and judge what it is, and what it is not; we must retain it in order to be able to recal it to the mind after the picture is removed; and we must determine and will whether it is good or bad, beneficial or injurious, under circumstances, to others. All this shews the attributes to have a general supervising power over the entire faculties and feelings.

Thirdly. That while the intellectual mind seems by the aid of the attributes to be able to act alone, the social mind or feelings appear to require the intellectual faculties to be added to them before the operations of the attributes can be brought to bear upon them. Thus we can form an estimate of the red colour by the faculty that supplies the idea of colour, aided by attributes which enable us to see, attend to, judge, and remember, what it is. But in order to judge whether that colour is good or bad, injurious or beneficial, to ourselves or others, we must take the intellectual idea of the colour which has been drawn out by the attributes, and bringing it to bear upon living bodies, and so comparing their relative difference and circum-

stances, we must, with all this knowledge, decide and will as to its being good or bad, injurious or beneficial. We find ourselves, in contemplating the actions of our fellow men, as they stand related to justice, mercy, and truth, totally unable to pronounce judgment upon those actions unless we bring the intellectual mind forward in the first instance for the purpose of judging the natural or physical circumstances by which the individuals are surrounded or to which they are related, or by which they are controlled.

Fourthly. While the individual intellectual faculties may be engaged separately from each other and from the social faculties, yet neither of these are able to act without the combined operation of the attributes. Thus, to simplify the subject, if we form the separate idea of the colour red, we have need of the combined operation of the attributes; for in order to perceive it we must be able to compare it, to retain the idea of it, to judge how far it is correct, &c. These attributes may be all co-operating to bear upon the single faculty of colour, but the faculties of form or number, or any other we may name, are not necessarily engaged or brought into a sentient operation, while that of colour is.

It seems, therefore, reasonable to suppose that the mind separates its action into these two independent divisions, the sentient and the moving: but as it will be necessary to go a little into detail in considering the practical uses likely to proceed from this division, and the different spiritual causes called into action, I shall carry the subject into another chapter.

CHAPTER IX.

THE MIND.

Mode of Operation of the Attributes.

Having endeavoured to point out the circumstances which require us to separate the faculties and feelings which, on the one hand, have their root in the sentient power of the nervous system, from the attributes of the mind, as I term them, which, on the other hand, have their root in the motive power of that system, it will be necessary to make a few observations more in detail upon the power and connexion of these attributes; for the contemplation of them as the great moving cause under the influence of the several spirits that will be presently shown to have their seat in the mind as circumstances may be, makes the question of the real characters and office of these attributes one of high importance in all the great medico-legal questions that bear upon the moral and particularly the criminal responsibility of certain actions. It would, however, be impossible, in a work like the present, to go into all the details of a subject of such magnitude. I shall therefore confine myself as much as possible to the consideration of the different modes of working of the

mind as an instrument, only availing myself of such details and examples as seem necessary to elucidate the point before me.

To determine the exact number of these attributes of the mind, and show their separate and combined powers, is very difficult while the present terms in mental nomenclature are in use. Such terms as thought, reason, judgment, and the like, evidently imply either the compounded effect of several kinds of attributes, which is the most probable; or, that the great moving power of the mind manifests its operation by a complex action, united in one, but capable of manifesting very different properties. However this may be, thought is a term implying the combined operation of all the attributes, and the same may be said of deliberation, imagination, and many others, which cannot take place without attention, perception, memory, will, and comparison. Believing that there are nevertheless certain primary and independent attributes in the mind of animals as of man, I think one of those is memory, another attention, a third comparison, and a fourth will. And in the case of man these attributes have added to them conscience and prescience. One reason for supposing these attributes to be separate is, that it is nowhere proved, though they have power to act in unison, that they possess any real power over each other. On the contrary, they individually are found to fail in the minds of those whose intellect or feelings have been injured. And the failing of one does not imply even the impairment of the others beyond that

injury arising from the want of connexion. The attempt to explain the authority of conscience over the will in man has proved abortive, because it is the balance of these attributes in the mind which constituted the perfection of the mind in its operation before the fall, and before it was injured by the spirit of evil. The loss of the power of the will is independent of the power of the conscience, which may yet dictate benefit or injury, or right or wrong, though the will may have no power to act. This is shown in cases of old established and habitual sins. The *will*, as an attribute of the mind, must of course be separated from *desire*, as Locke, Edwards, and others. have very properly done, and the necessity, in a medico-legal sense, not only of so doing, but of marking with true distinction the nature of the difference between the desire and the attribute, is of far greater importance in determining many urgent points relating to the welfare, the happiness, and the liberty to be enjoyed by every individual, or by a community of men.

If it can be shown, as most unquestionably it can, that the power of the will, as an attribute of the mind, may be lost over one particular desire, while its power over some other desire in the same individual is retained, there can be little doubt that such a person, as relates to the particular desire thus affected, is certain, in the matter of his own interests, to suffer loss of property, character, and health, according to the nature of the desire so implicated, which constitutes, in a true psychological sense, an unsoundness of mind. And if

this condition is considered in relation to the interests, character, property, or health of others, it is doubtless, in this latter sense, a grave neglect or oversight in jurisprudence not to have recognized such a weakness, by legislating for the more consistent protection of those subjects who suffer from its continuance. The circumstance of the individual knowing the evil consequences in such cases, does not give to the will greater power or choice, while the object of desire is within reach. If, therefore, those objects, from their nature or position, cannot be removed from the individual, rather than that others should so seriously suffer, the individual should be removed from them. By this means the liberty of the subject is really extended; for it must be obvious that as in the case of the drunkard whose family are brought to ruin, or whose parish may at last have to support him, all those who are thus implicated by his conduct are tied down by the most arbitrary and unjust fetters, because they are brought upon them by the selfish and ungovernable acts of others. The practical question then comes, should all persons who manifest a similar infirmity of the will, to the injury, loss, or suffering of others, be permitted to have complete control over their affairs and actions? The right answer to this question would, if acted upon, lead to the most favourable results. And as in all cases where the laws are dictated with justice and judgment, good must follow, so here, the application of some salutary but legal restraint would doubtless exert a marked influence upon all so affected. When a man

voluntarily, or rather, having forfeited the healthy balance of his will in this point, involuntarily deprives himself of reason by habitual intoxication, he ought either to be legally regarded of unsound mind, or else be made criminally responsible by the *act* of drunkenness. But to wait, as the law now does, till the poor reason-stricken being commits some offence, more or less heinous, of which he was unconscious, and then to charge him with crime committed when he was without reason,—this is not wisdom. I do not think the question of moral responsibility can be doubted in these cases; for that responsibility goes much further into cases of genuine insanity than is generally supposed, is now no longer to be denied.

The privation of liberty should not be made to turn so exclusively upon the conscience as it generally is, as in such cases we get the worst consequences, in no respect more hopeful or consolatory, because the individual is perfectly conscious of the tendency of his acts. The will, when weighed down by the spirit of evil, is like an impetuous torrent that cannot be stayed. And if the attention or judgment is brought to bear upon the desire thus affected, these are in like manner unable to see the evil consequences that must follow, so that the conscience also suffers, though not in the same ratio. The terms hardened conscience, acute or sensitive conscience, blinded conscience, are commonly used to convey the idea that this attribute is an innate feeling of the mind, but by regarding it as an attribute or moving power we are able to see how the conscience

may be acute upon some points and dull on others, while upon others again it may be almost extinct. This could not be if it were a *faculty* of the mind; so, likewise, we may have sound attention upon one point, and little or none upon another. We may be able to compare some sorts of things together, but not others. We may remember the different notes of music or the mathematical signs in geometry, but we may be unable to retain the difference of one colour from another, or the features of one country from another, in the mind.

The attributes, undoubtedly, have more or less strength, both in different individuals, as well as in different faculties of the same individual. But whether this difference corresponds with the degree of power or strength in the faculties is very doubtful. There is reason to think both the faculties and attributes may be strong in some and weak in others; or one set may be strong and the other weak; or one faculty may be strong, and the attribute moving it be weak. What a gigantic memory Magliabechi had for general knowledge conveyed in books, and for the localities they filled; yet upon other matters his mind was inactive. A shepherd boy, who was totally unable to read or write, and otherwise quite ignorant, could count two hundred sheep in rapid succession, calling them and identifying them by name. It was said of the Emperor Adrian that his memory was so generally good, that he remembered every incident of his life, and knew every soldier in his army by name.

What is termed a want of memory is not an entire absence of this attribute from the mind, for in another form it may, in the same individual, be really strong; but it is the partial application of this attribute to a few faculties, to the disparagement of others.

The different attributes vary in the same individual greatly. We find those with a good memory upon almost all points, where the judgment is very weak. Or the attention is weak and the memory weak, but the comparison is strong.

There is another circumstance connected with these attributes which may be viewed as characteristic. It has been shown by morbid anatomy that the various losses on particular points have been accompanied by more or less extensive lesions of the brain. But morbid anatomy has hitherto failed to show the relation between the part injured and the particular species of memory lost. This shows that as an attribute the memory cannot be localized, or universally destroyed by the destruction or injury of a part. Pathology has also shown that the memory may be obliterated completely for a time, from the excitement of passion, and return again in full power. The memory also is lost over particular faculties and feelings in many cases of paralysis, and to a certain extent this has been recovered in some.

The same observation that has been made respecting the connexion we have hitherto failed to discover between the loss of memory and the disease of the brain is also applicable to each other attribute of the mind;

for neither attention, perception, memory, comparison, will, conscience, or prescience, can be localized.

I have said that while the intellectual faculties, by the aid of the attributes, can act alone, the feelings and sentiments cannot act without the intellectual faculties be added to them. But in the case of the intellect being the only part worked, it will be found that this cannot be done by the aid of the attributes of attention, memory, perception, and judgment alone, but to these must be added will, conscience, and prescience. Thus, in contemplating matters purely intellectual, we cannot embrace their *entire qualities or uses*, abstractedly as regards the feelings and sentiments, without bringing those attributes of conscience and prescience to bear upon them; which act constitutes the more expanded intellectual operation we dignify with the title of reason.

But it is when we come to add the intellectual to the social or the moral part of the mind that, by the aid of the additional attributes given to man, we are able to compass all those difficult points relating to human nature or the animal kingdom; points which bear upon jurisprudence or justice regarding man in his social and moral relations. To hold correct notions of justice, it is right that the mind, in the first instance, should be able to be assured intellectually of the certainty and the truth of certain qualities and uses of things in the physical world, which are supplied to him by the simple operation of the attributes upon the intellectual faculties. And errors in these attributes, as

they are so brought to bear upon the intellectual faculties, lay the foundation of vices and crimes which afterwards involve the sentiments and feelings. A man who is not able to understand the true characters and uses of things after they have been explained to him intellectually, would, in acting criminally, be irresponsible for his acts; nor would his conscience do more than tell him he had done wrong, without informing him in what way. It is easy to suppose a person not having a memory for certain objects, would at the time of contemplating them be able to determine their relations to good or evil by means of the other attributes of the mind; but forgetting those objects as soon as they passed from his mind, he would not be responsible for the acts he subsequently performed in relation to these objects. The simple relation the intellect bears to truth is necessary to be held intact before the consequences of separating the intellect from the feelings in the moral operations of the human mind can be regarded in the light of responsibility. This is the great point for the consideration of all who legislate in criminal cases. It is possible for the mind to be in a pathological sense diseased, and yet that mind may be in justice regarded as responsible that commits crime under such circumstances, provided the intellectual faculties can be used. Just as the liver may continue to perform its office though greatly diseased, provided there is some kind of circulation through it.

Those, therefore, who know intellectually and morally what crime is, but who cannot avoid committing it on

account of the loss of the power of the will over that particular crime, are not only responsible to God for their acts, but should be treated judicially in every respect as responsible subjects of the earthly head who presides over the community of which they form a part. This may not be the opinion of some mental pathologists; but it is, nevertheless, undoubtedly the only practical view to take of crime; and the sooner the judges of our land adopt it, the sooner the public weal will be disentangled of much partial and necessarily unjust legislation.

The mind contemplates truth, when the faculties and feelings are so perfectly adapted, and the attributes so correctly balanced, as to be able to behold the qualities and phenomena of all created bodies, inorganic and organic, which were originally made perfect by the great First Cause of Truth. The more complete and equalized these faculties are, and the more uniformly their attributes act, the more clearly must we apprehend and delight in truth; and it is impossible for virtue to exist where the right apprehension of truth cannot take place. For, though virtue may dwell in the uneducated mind, yet that mind must be able to apprehend truth, however simple, as far as the understanding of the individual can go. Virtue is to the moral part of the mind what truth is to the intellectual, and it is the bringing up of truth to the moral feelings, and the application to these of the high attributes of man, which enable her to follow virtue in the path of truth. Justice is the transfer of the principles of virtue

from man to his fellow-creatures, and the right appreciation of truth and the application of it to others.

Nevertheless it must be admitted, that jurisprudence in relation to the moral feelings in man has never attempted to prove, nor to my knowledge do the writers on ethics hint at the necessity of so doing, the very close relation, the intimate and inseparable dependence, that subsists between the intellectual faculties and the moral feelings. As a responsible being, man is regarded by the casuist simply as the discerner of right from wrong; but this conclusion he cannot arrive at short of the intellectual as well as the moral soundness of his mind, and by the aid of *all* his attributes. Is not the casuist, however, attaching too universal an importance, and placing too much reliance upon a single attribute, conscience, when we know from experience that with all the necessary power of the attribute entire, there are persons who daily commit the highest criminal acts, knowing their tendency and the consequences to which they inevitably lead, and who, regardless of this monition, act so impetuously and so determinately wrong as to assure us that the power by which this action is committed is one altogether independent of the power that tells the individual the course he is following is criminal or wrong? The casuist is correct when he contends that the power to detect right from wrong is one which fails in the mind, perhaps later, or at any rate as late, as any other attribute, and, if so, the criminal is a more responsible being in the sight of his Maker than he has generally been considered by his fellow-mortals.

But do we not strangely overlook in these cases the really morbid condition of the feelings which, beyond a certain point, carry away the power of the will, destroying its balance, and so, in strict meaning, obliging the individual so placed to take a certain course which he cannot resist, even though he sees it is wrong? The constitution of our criminal code teaches us to wait for this unhappy consummation of utter helplessness and hopelessness under a false idea of extending the liberty of the subject; while in so doing we are positively diminishing that liberty a hundred-fold. Not only is it not true towards the real delinquent to society, but unhappily towards everybody else to whom, as a member of society, he is in the remotest degree related. This ought not so to be. It shows most unmistakeably, it points with an indelible mark to, the great disparity which still is permitted to continue between English justice and true justice, between the justice of the most enlightened and compassionate nation of men and the justice of God. That benevolent Being has provided us with an attribute we can use largely when it is to compass ends of a worldly policy, the attribute of prescience, or that of power, that permits us, unlike the brutes around us, to look so far into the future as to be enabled to avoid or to provide against the effects of certain events, or of certain conduct, the consequences of which would be injurious to us whether as individuals or as a society. Yet our law-makers are almost the only members of society who despise this high privilege by failing to avail themselves of its advantages.

The power of the legislature would be greatly strengthened by a more extended application of this attribute to the conduct of corrupt and criminal men; and we shall have less of those vexed questions to which the whole of the judicial bench is now and then called in conclave to resolve,—but alas, in vain,—if we determine to mark more emphatically the first signs of weakness or depravity as they relate to the interests or welfare of others. Men should not only be taught by writers on ethics, but plainly told by the laws of our land, that they cannot commit acts injurious to society in the remotest degree, or even to themselves as forming a part of society, which imply that their feelings have carried away the balance not only of their will, but also of other attributes, without forgetting their privileges whether as citizens or as men. Some of our best authors have argued *criminal acts* to be the offspring of a partially unsound mind. But if moral and physical remedies are found to restore the very insane, they must surely, if applied with judgment, be more applicable as well as valuable to the criminal who is brought under their influence. When the criminal pleads before the bar of justice that his murderous acts have resulted from an uncontrollable state of the mind, and, on that account, with tears in his eyes, puts in a plea of insanity, he really is, in a pathological sense, unsound in mind, though he knows as well as the judge does the nature of the crime he has committed, and the relation such crimes bear to the society of which he is a member. How, then, is he to

be treated? Surely not altogether as an irresponsible being, with leniency. The effect of such a course of proceeding is now well ascertained, and we must henceforth take a view of crime as a responsible act in some other sense. Whatever we do, we must not, and cannot with impunity, regard such acts as otherwise than criminal. And the more they are treated in this light the less frequently will they be presented before the judge for his decision.

In all those cases where the attributes are brought to bear unequally or involuntarily upon the feelings so as to lead to crime, the question of irresponsibility ought to turn, not upon the loss of balance in the feelings, to which those attributes alone are applied, but upon the sound or unsound operation of those attributes over the intellectual part of the mind; and where this is confused there can be no ground on which responsibility can rest. Then, and not till then, the person is *legally* insane; and short of this irresponsibility cannot be made to rest. Crime, unfortunately, in a human and in a divine sense, are two different words, or at least are the same terms so widely construed that it is puzzling to devise a remedy for that species only that is conflicting merely to the interests of ambition or avarice. But if our laws were just, the habitual drunkard, gambler, or debauchee, would find the fruits of his vicious practices in a position of society below that which is at present taken by its lowest members. But the state of our criminal code at this time marks with a very broad line the

downward tendency and gradual decay of our noble constitution. The fiercest and most diabolical acts of personal violence are barely marked by the most trifling punishments. And when, by a slight extension, the same description of offence has advanced up to the plainest and the most undeniable murder, the wretched criminal often escapes upon a plea of insanity. "Shall I not visit for these things, saith the Lord: shall not my soul be avenged on such a nation as this?"

As the faculties and feelings are ever varying, and become in different individuals more or less ascendant, so do the attributes become more concentrated upon those faculties and feelings, producing actions that are good or bad, useful or injurious, in proportion to the balance of power which they hold.*

In the moral government of the world, the all-perfect and benevolent Creator has so ordered, that man doing right and acting in strict regard to justice, is really doing good, not to others only, but to himself also: that is, he is increasing his comfort and happi-

* It should be remembered that all the attributes are required to be in operation before the machinery of the mind can act soundly. The injurious or morbid action of one attribute must consequently constitute, in a pathological sense, either temporary or permanent unsoundness of mind. But the practical question is, should those who are thus affected be treated as responsible or irresponsible beings? Certainly as responsible beings they should be treated; and if their acts lead to crime they should be treated as criminals, and as justice cannot overlook crime, neither should these cases be overlooked by justice. The acts of all criminals are, precisely in the same pathological sense, the result of unsoundness.

ness more than he could do by acting with injustice towards others. The feeling of avarice is contrary to truth and justice. After we have provided for the demands that are naturally made upon us in the station in which we are placed, the desire to accumulate wealth is the act of a mind in which the feelings are not balanced on that point according to the right interpretation of truth and justice. And hence it may be inferred that such minds are not likely to hold sound views on those points that bear upon the value and distribution of property, or the relation that property bears to society or to the individual, although it may be wise in the matter of conserving property; and this leads to the establishment of laws that are partial and oppressive, that deprive the one to give to the other.

All the faculties, sentiments, and feelings, implanted in man, whether for his continuance, preservation, or happiness here, were doubtless originally made to possess that strength or virtue in action which led to the mutual welfare and happiness of all; and to that reciprocity and just balance of thought and feeling which made each to act, not for the benefit of himself alone, but for the comfort and advantage of all. The agent that maintains this power to know truth, to do justice, and to love mercy, is that spirit of man which revelation affirms God placed in him at the time he was first created. The same authority informs us that this very mind in which the spirit of man was placed soon became assaulted by a more powerful spirit,—a fallen angelic spirit,—the spirit of evil, which soon carried it away, bearing down the tender instrument in which

man's spirit had been placed, till it had nearly become vanquished. He, however, who had power even above the spirit of demons, graciously came to the relief of fallen man, and, by the promise of his Holy Spirit to all who asked for it, he revived the hopes of the spirit of man that it should be again restored to the glory of God.

We have thus authority for believing that the instrument in which the mind is displayed is one acted upon by three very different spirits,—viz. the Holy Spirit of God, the Spirit of the Devil,* and man's spirit, the latter being ever under the influence of the one or the other of the two former. After the Fall, the mind of man became so incapable of knowing what was good, holy, or just, that it became necessary for this purpose to reveal the law or covenant as a standard of holy obedience: moreover, his mind was now and for ever so much injured by the spirit of evil that it could never recover that state of sinless obedience which would make it fit for the presence of a Holy God. A mediator was accordingly given in the person of God's only Son, whose intercession was promised to all who, by the help of the Holy Spirit, believed in him. It is through the Satanic spirit, and not the spirit of man, that this mind, about which I have been speaking, has been so distorted and diverted into the paths of injustice, unfaithfulness, cruelty, and vice, that it is ever inclined in this direction without help from the Spirit of God.

It has thus been shown what is the character of that

* Plato believed (De Legibus, lib. i.) that every person has two dæmons (Δαίμωνες), "knowing ones," not necessarily evil spirits,—one prompting him to evil, the other to good.

great mental stage, the mind, on which the three spirits we are about to speak of are permitted, for wise and glorious ends, to enter and to act their parts. Before, however, I do so, I shall take a general review of the three spirits the operations of which I have been pointing out, and in this recapitulation I shall dwell upon the marks of their distinct identities. The power, the influence, and the destiny of the higher spirits, are subjects of grave importance to man as he stands related to the past, the present, and the future, calling for his most thoughtful and deliberate judgment. Thousands and tens of thousands of the human race may profit by giving heed to the position these spirits take, and pondering well the awful power they possess for weal or for woe, for time and for eternity. Surely, then, their existence should not only be recognised, but all that has been revealed concerning them should be treasured up and dwelt upon with the carefulness, the discernment, and the diligence they demand. "Believe not every spirit, but try the spirits whether they are of God,"* was the advice given by the evangelist John to the first Christians, whose faith had been assailed by the platonic and pythogorean philosophers, by the infidel doctrines of the Gnostics, and the subtle and sensual arguments of Cerinthus.

* 1 John, iv. 1.

CHAPTER X.

THE SPIRIT OF MAN.

Operation of the Spirit of Man in connexion with the Human Body and Mind—Its Subjugation to the Spirit of Evil, and the Consequences.

THOSE phenomena which I have shown in the three last chapters were to be referred to the spirit of life and mind, we have seen are in some degree common to the whole living creation; and on this account I have not failed to show it would be inconsistent and unreasonable to argue that they were indicative of the presence or the action of the immortal spirit of man.

I have now to speak of the existence of those phenomena which, inasmuch as they are absent in the mental operations of all other animals, and are therefore peculiar to those operations as we behold them in man, may very properly be referred to the spirit of man, which is placed, as we are informed in revelation, temporarily, exclusively, and conditionally in him.

As almost all the proofs of the separate and independent existence of the spirit are to be gathered from revelation, our discussion of this point must be entirely governed by a right apprehension and interpretation of

that revelation; while psychology and mental physiology are useful, after the facts have been furnished to them, in correcting those erroneous views which might arise were we to exercise no thought or reflection as to the reasonableness or the consistence which these revealed facts bear to the phenomena naturally deduced and compared.

The real existence and presence of this spirit in man we cannot deny; for it is stated in many passages of Scripture to have been placed there by the Creator. But that we could never have arrived at the truth of this fact, unassisted by revelation, is most clearly evidenced by the past history of man as we trace his progress through the dark and heathen stages of his existence up to the most highly cultivated state the natural mind can reach, the light of God's Word being withheld from him. With all the superadded strength and complexity in the organic instrument which distinguishes him from the brutes in this uncivilized and degenerate state of barbarism, as well as in this high state of mental cultivation, he is equally and clearly incapable of discerning spiritually what is the object and end of his creation, or what relation he bears to his Divine Creator, without the assistance of revelation. Though in these states of the natural mind man is ignorant of the destiny of his immortal spirit within him, yet the knowledge of right and wrong to a sufficient extent to avert his total destruction by the spirit of evil was mercifully permitted to lighten the complete darkness into which he would otherwise fall. "These," says the Apostle,

in speaking of the heathens, "not having a law, are a law unto themselves."

In revelation we read that "the Lord God formed man, the dust of the ground, and breathed into his nostrils the breath of lives;"* viz. that *spirit of life* which animates the body and gives it power to perform those functions necessary to the formation and continuance of life, or the carrying on of the ordinary phenomena of mind necessary to their existence; and that spirit which, in obedience to revelation, I term the *spirit of man*, which is to pass out of its present tenement into another state, hereafter to be united to a glorified body. And Solomon, to distinguish these two points, immediately after he has stated that all, both man and beast, go to one place and turn to dust, of which their bodies were made, asks this question: "Who knoweth the spirit of man that goeth upwards, and the spirit of the beast that goeth downwards to the earth?"† Job also says, "there is a spirit in man, and the inspiration of the Almighty giveth him understanding;"‡ and this spirit it is that makes him independent of and superior to every other creature, that "teaches him more than the beasts of the earth, and makes him wiser than the fowls of heaven."§ The Apostle Paul distinguishes these two spirits very clearly: first, when he tells the Thessalonians, "I pray God your whole spirit, and soul, and body, be pre-

* Gen. ii. 7; *Hebrew*—life or lives. † Eccl. iii. 21.
‡ Job. xxxii. 8. § Ibid. xxxv. 11.

served,"* &c.; and secondly, in describing the power of the word of God, in addressing the Jews, he says, it is "quick and powerful, and sharper than any two-edged sword, piercing even to the dividing asunder of *soul and spirit* (ψυχῆς τε καὶ πνεύματος) and of the joints and marrow."†

This spirit is called in the word of God, also, "our spirit,"‡ and it is generally understood to be the conscience of every believer, as propounded by the learned Witsius,§ whereby he may be conscious of what passes in his own heart. But this spirit is not the conscience, which I have explained to be only a particular attribute of the mind by which, after the fall, the right and the wrong, as those terms relate to the moral world, have been presented to it. The conscience is one of those means by which the spirit of man is informed of the true effect of actions as they relate to the moral world, not in the believer only, but in every living human being. Indeed, to know good and evil comes to the human mind through the operation of a spirit, higher in power than that of the spirit of man, upon that attribute of his mind we call conscience. In other parts of Scripture this spirit is called "the heart of man" condemning or acquitting him.‖ But that this conscience cannot be the spirit of man, or the spirit of God acting upon the mind of man, is rendered more certain by that passage—"their consciences *joining* to bear witness¶ (συμμαρτυρούσης αὐτῶν τῆς συνειδήσεως)

* 1 Thess. v. 23. † Heb. iv. 12. ‡ Rom. viii. 16.
§ Œconomy of the Covenants, lib. iii. cap. 11.
‖ 1 John iii. 20, 21. ¶ Rom. ii. 15.

and their thoughts the meanwhile accusing or else excusing one another." Our spirit, or the spirit of man, therefore, has the use of the conscience in addition to other attributes of the mind, by which the law of God may be written upon the heart, and the nature and effects of sin brought home to the spirit of man.

There is, therefore, abundant evidence to shew that man has an additional spirit placed in him which has the power of imparting to him, and to him alone of all created beings, a knowledge of the existence and attributes of his Creator, and of his own existence and destination. With these superior advantages, and the exalted privilege of being lord of the creation, and so constituted as to hold every other creature in subjection, he has also corresponding responsibilities and conditions revealed to him which are unintelligible to the brutes, and which will make him answerable to his Creator for the manner in which he has discharged those responsibilities and fulfilled those conditions.

These are very remarkable features imprinted upon man, and serving to place him in such new and different relation to other parts of the living creation, that having the fact revealed to us, we can most reasonably believe it to be possible that there is a spirit placed in him having more exalted and extended powers of action. And this places him in a position so much elevated above them, that not only Scripture, but our reasoning faculties as well as our moral sense, combine to assure us it bears many relations to a state of future existence for which it is ultimately intended.

We receive the intelligence, then, through revelation, that God has placed in man an immortal spirit. That spirit was not concerned to convey to him a knowledge of the qualities and uses of the physical world around him, for this he had in virtue of his common life with the rest of the creation; at the withdrawal of which, like theirs, his body will turn again to dust, of which material they both alike are made.

But the office of the spirit of man was to reflect the image and glory of the Divine Creator as He is capable of being contemplated by man, not only the maker and disposer of all we behold, but as the great model and example of perfection in the majestic attributes of truth, holiness, justice, benevolence, and mercy. These were most noble and divine impressions first implanted in man, the influence of which doubtless, had they not been destroyed by a more powerful spirit than his, would have extended their influence over the entire range of the living creation. They would have so uniformly preserved the true integrity and balance of the originally perfect mind as to maintain a perpetual harmony and fidelity of action. In this exalted position the spirit that God placed in man was truly able to distinguish him from all other creatures which were subservient to his will. It was a higher spirit than theirs on many accounts, and indicated this superiority by the exercise of mental attributes which implied a rational foreknowledge of circumstances and events relating to the present world even, to which no other creatures could attain. But in a more especial manner,

its superiority was marked by the manifestation of those important powers of the mind that brought it into immediate communion with its Maker.

It is hardly necessary to bring forward any argument here, to shew that this spirit is, in relation to those we have hitherto been considering, of a higher nature. Revelation has marked its rank among the spirits that animate the material world, in recording its high-born destiny. When the present condition of things has passed away, and the body it now dwells in has returned to its original elements, this spirit will yet put on an immortal body, through which it will be enabled to contemplate God as He is. For the present, its temporary abode is in the bodies of men.

In this abode, doubtless for reasons all-wise, and just, and good, the spirit of man was assaulted by a still higher and more powerful spirit,—the spirit of a fallen angel. This brings us to contemplate what is commonly called the fall of man.

One of the first acts of man after he had been so highly gifted by the Creator, was to abuse the power of free-will by turning the high attributes of his mind away from obedience and truth. That mental balance of the faculties and feelings which alone was placed at his disposal, was rapidly lost, and he became a slave to the abuse of those feelings and attributes of his mind which God had intended him only to use.

Of the fall of man from his first estate of purity, innocence, and happiness, we read in the Pentateuch;

and it is to this source alone we are indebted for any information we possess as to the cause of our present degenerate state. There we learn, that Satan, whether through pride, envy, or any other cause, is not recorded, got partial possession of the spirit of man by assaulting his mind with temptation, and that at an evil moment, when off his guard.

The way in which the spirit of man, before its subjugation to the spirit of evil, manifested itself, was by so leading the desires, the will, and the affections, and all other attributes and feelings, as that they had a perpetual tendency to acts and thoughts which led to the happiness and the good of all. To the mental conformation necessary to all the higher animals, are added such powers in man as would enable the spirit of man in him readily to contemplate the divine perfections in all their glorious harmony and beauty. The thoughts, the will, the memory, the judgment, the conscience, the perception, the intellectual faculties, moral sentiments and feelings, were all placed at the disposal of the spirit of man, and by it engaged in fulfilling those great and divine purposes, and in the contemplation of the joy and peace that was the natural consequence of this exalted perfection of things.

Now, that these attributes and powers of the mind were not the spirit of man, neither were they exclusively, and, in the ultimate sense of the world, *solely* capable of being set to work by that spirit, has been partly proved by the fact, that many of the same powers are to be recognised in animals, which powers in them

have likewise been perverted to purposes of evil, though not in the same responsible manner they have in man. And further, that they could not be synonymous with the spirit of man, but were only the mental operation or machinery by which that spirit displayed itself, is still further confirmed by that which took place after the Fall. For at that event these very attributes, faculties, and feelings, were taken possession of by a more powerful and a more *knowing* (δαημὼν), though an evil spirit, which would have controlled the spirit of man there as completely as the spirit of God can control it. Lest the spirit of man should, on this account, be everlastingly overpowered by this demoniacal spirit,—the spirit of evil, which had now entered the field of operation, the mind, God graciously and timely offers to send a yet more powerful spirit than that of evil, which clearly has the power of restoring the balance of the mind to its original course of holiness, of faith in and obedience to the divine laws.

I cannot pass over the effect of the fall upon the whole living creation, for with man "the whole creation groaneth and travaileth together;" and as a consequence of this assault upon the spirit of man, all are made subject to the curse and dominion of death. As though the spirit of evil aimed at the destruction, not of man's spirit only, but of the whole harmony and happiness of the brute creation, we see them drawn into the vortex, and afflicted, as it were, with the consequences of man's sin. There is much to draw forth our admiration of the many wonderful faculties, the

many affecting feelings which they display, and which the Creator has bestowed upon them. And that they are, though subjected to death for man's transgression, nevertheless the objects of the Creator's care, and ever of his commiseration, we have many Scriptures to attest. "The eyes of all wait upon thee, and thou givest them their meat in due season." "That which he giveth them they gather." "He openeth his hand, and they are filled with good." "When he hideth his face they are troubled." "He feedeth the fowls of the air, and not a sparrow falleth to the ground without him." In the hundred and fourth Psalm he is represented as caring for all his creatures, and upholding them by his continual providence. And when he appeals to the prophet Jonah—"Should not I spare Nineveh? that great city," he not only pleads for it on account of the six-score thousand persons, but also because it contained "much cattle;" and this would lead us to infer that all the creatures he has made are alike upheld by the same spirit of life, as they are alike the objects of the same bountiful and divine care.

It ought, therefore, to be not a little humiliating to man, in contemplating the degradation and suffering of the brute creation, to think that they are so situated on account of his infirmities. But can it be possible that the wonderful faculties they display in their present state of existence were intended only to subserve the purposes of a world disorganized and marred by the ravages of sin? Surely they were originally designed for higher and more durable ends, and there must be a

peace and harmony for them yet to be disclosed,—a state of tranquil enjoyment, where sin cannot enter to disturb the uninterrupted exercise of those faculties and feelings which a benevolent and bountiful Creator first bestowed alike upon every living thing, with a view to their happiness. Surely there will yet be a time, and revelation has foretold it,* when man, or rather the spirit of evil that is in man, will no more be permitted to exercise an abusive and arbitrary dominion over them,—a power that has been changed from protection to cruelty,—when they will no longer be exposed to the fierce and ungovernable passions of their more powerful enemies,—no longer be a prey to the devouring appetites of whole races degraded and deformed by the effects of man's fall. Surely there will be yet a time, if it is only to carry out the first majestic and beneficent design of their Creator, when "the wolf and the lamb shall feed together," and "the wolf shall dwell with the lamb, and the leopard shall lie down with the kid; and the wolf and the young lion and the fatling together, and a little child shall lead them;" when they shall enjoy the free use of those natural and kindly feelings planted in them by their Maker; when they *shall be free from pain and death, and that during a lengthened period of time.*

The probability is, that the mental subjection of the spirit of man to the spirit of evil, and the degradation to which he fell by this assault, consisted greatly in the

* Rev. xi.

application of the will, the controlling attribute that had been set over the desires to extreme and abusive purposes. No longer having faith to believe what God had told him, but determining to act and judge as if he were without that guide to truth, he experimented upon the extent to which his mind would go, and he thus soon became the involuntary slave to those desires, without the power to control them or make them subservient to any thing but evil. Like an instrument that had been strained or violently handled, it failed to answer with certain sound,—all harmony was at an end,—all balance was lost,—and the thoughts of the mind were only evil continually.

This serious injury to the mind may be put in another way. Originally it was adapted for the purposes and use of the spirit of man; and (judging from the long time this instrument lasted in the first ages of the world, even after it had been marred by Satan) it is not unreasonable to suppose it would have served the purposes of man's spirit truly and faithfully during the six thousand years the world has lasted, without decay, had it not been violently forced and overcome by Satanic power.

But it was not to be supposed that, in the first instance, the entire bulk of the mind,—that is, all its various attributes, faculties, and feelings,—became involved in one universal surrender to the spirit of evil. Doubtless that spirit was resisted, and its power to subjugate whole generations of the human family was gained by artful but untiring perseverance. More pro

bably a single feeling or propensity was first assaulted and weakened, and the balance of those controlling attributes of the mind,—judgment, will, memory, conscience, and the like, over that particular feeling,—was first endangered and then lost: and thus by inheritance, according to a prophetic announcement, the abuses and sins resulting from the loss of balance in a particular feeling or desire descended to the third and fourth generation of the unguarded or offending parents. And so, from the very beginning of the fall of man, we may trace a departure from that sound and equipoised condition of the mental constitution in the perfection of health, and elasticity which he first received at the hands of his Creator. In this sense the mind has been injured and weakened more or less i[illegible] child of Adam; and the history of his imme[illegible]ate descendant, who first shed the blood of his o[illegible] brother, shows us the awful consequences that so rapidly followed the abuse of that mind which God gave m[illegible] use.*

* Against the practice of this horrible crime, which threatened in its consequences the almost total annihilation of the human species by their own hand, God has most unmistakeably recorded His special commands. As that command was given among the very first to Noah after he quitted the Ark, it is not improbable that this crime had helped to fill up the iniquity of the antediluvians, and, therefore, required to be thus early singled out as one to be met by the forfeit of the life of the person committing it. Accordingly, God repeated the same command when He delivered the law to that nation that was to honour Him upon earth in the sight of the heathen nations around, and it has ever been regarded, till of late years, as a command still to be enforced. But expe-

That there are degrees in the abuse which the mind has undergone by the action of the spirit of evil upon it, in the different families of man, the curse pronounced upon Canaan fully proves. The sins

pediency thinks differently; and it is not improbable that, when man ceases to disregard the command of his Maker upon this point, that God will take it in His own hands, when His judgment will fall alike upon the innocent as the guilty: the one suffering for the sins of the nation that disregards this great command; the other, by his evil example not being treated as God has ordained, contaminating others with the same crime, and so involving a fearful destruction of life, similar to what we see now going on in the sister kingdom. It has been urged that Cain's life was not taken for the crime he committed; but, setting aside the fact that the commandment was not given when Cain killed his brother, though doubtless his conscience told him what he was doing, there is much reason to believe, from the total absence of any account of Cain's death in the Canonical pages of inspiration, that he did not "die the common death of all men;" and this is greatly strengthened by high apocryphal authority. In that ancient manuscript published under the title of the Book of Jaser (which has this remarkable circumstance, among others, to substantiate and recommend it—viz. that there are not more than seven or eight words in the whole book that, by construction, can be derived from the Chaldean language), mention is made of the manner in which Cain came to his end, which explains that passage in Genesis, "I have slain a man to my wounding, and a young man to my hurt."—Gen. iv. 23. The narrative in the Book of Jaser is as follows:—"And Lamech was old *and* advanced in years, and his eyes were dim that he could not see, and Tubal Cain his son was leading him; and it was one day that Lamech went into the field, and Tubal Cain his son was with him; and whilst they were walking in the field, Cain the son of Adam *advanced* towards them; for Lamech was very old, and could not

of one race may thus have been more heinous, and so have brought down upon them a more judicial punishment from God than another: in other words, the spirit of evil may have had a more deadly influence and exercised a fiercer power upon some than it did upon others. In this sense the weakness has fallen nationally upon whole races of the human family; so that at this time, awful as is the thought, there are *hundreds of millions:* and what must be the number, whose spirits have passed out of the body, who were ignorant of God and his revealed will,—who know not, and never knew, the remedy God has provided in the gift of his Holy Spirit, by which man may be again brought back to the obedience of faith, in the consecration afresh of those powers which have been degraded and distorted by sin!

But this weakness has also fallen individually more heavily in some directions than in others, as I shall

see much, and Tubal Cain his son was very young. And Tubal-Cain told his father to draw his bow, and with the arrows he smote Cain, who was yet far off, and he slew him, for he appeared to them to be an animal. And the arrows entered Cain's body, although he was distant from them, and he fell to the ground and died. And the Lord requited Cain's evil according to his wickedness which he had done to his brother Abel, according to the word of the Lord which he had spoken. And it came to pass, when Cain had died, that Lamech and Tubal went to see the animal which they had slain, and they saw and beheld Cain their grandfather was fallen dead upon the earth; and Lamech was very much grieved at having done this, and in clapping his hands together he struck his son, and caused his death."

have occasion to show in contemplating the power of the spirit of evil under the head of the spirit of angels; and our compassion is daily implored for the wants and afflictions of our brothers who are drawn out upon beds of sickness, pain, and mental anguish, where not only do we behold their bodily limbs and animal powers diseased and ready to perish, but also that organic part, the brain, which was made to give joy and peace, intelligence and benevolence, through that happy spirit for which God had formed it, is blasted and disorganized,—being converted into a foul receptacle of the spirits of devils, where they fail not to torment the poor sufferer to desperation. Of the power of the Holy Spirit over the mind of man in this humiliating state I shall have to speak; but, first, it will be necessary to consider the other state, in which revelation informs us the spirit of man will finally take up its position.

Of the Immortality of the Spirit of Man in connection with the Resurrection Body.

After the spirit of man has passed away from its earthly tenement, we are instructed from the Word of God of the final habitation it will take up in a glorified body.

It has been very generally taught and believed that the spirit of man, or, as it is more commonly called, the immortal soul of man, after it quits its earthly house, will be freed as if from some chain that had confined it, and so permitted to exert its almost infinite powers in a disembodied state. But certainly

this philosophic doctrine is most conflicting to that of the resurrection of the soul in a body that will be fitted for it, which we receive first through the pages of revelation. The immortal soul as a separate, individual, and uncombined entity, having powers in virtue of its spiritual existence alone, is an idea not to be found in Scripture, and it is remarkably at variance with that great subject, there so much dwelt upon—the resurrection of the body.

"The hopes of a future state," says Carmichael,* "rest on a double foundation; for there are two distinct and dissimilar means by which it may be realized: the resurrection of the body, a tenet whose principal support is to be found in Scripture; and the imperishable nature of the essence of the soul, a more universal doctrine, transmitted from the remotest antiquity, and for which we are not indebted to the sacred records of the Jews, but to Pagan philosophy. Whether oriental sagacity was really the source of this opinion, or merely the medium through which it descended from an earlier era or a higher authority, we are more deeply interested in pursuing such investigations as may satisfy us of its truth, than those which consider the validity of our expectations of the resurrection of the body. Those expectations repose on evidence to which no argument can add weight, and whose strength cannot be further increased by any exertions now to be made by human

* Physical Considerations in connection with Man's Ultimate Destination, &c.

intelligence; but with this doctrine the other has been unnecessarily intermixed, and the resurrection of the body and the immortality of the soul have been strangely confounded and identified in modern belief, although they are totally imdependent of each other, and even, in the opinion of some able and pious philosophers, altogether incompatible. Yet where is the man who would not be anxious to establish, as an incontrovertible truth, that in 'shuffling off this mortal coil,' we do not cease to exist, to think, and to feel,—that the slumbers of the grave are no encroachment on our energies,—that the living spirit looks down without concern on the mouldering dust it has abandoned, and, enjoying its new liberty, neither regrets their separation nor needs their re-union?"

Against this doctrine of the immortality of the soul as an existing separate entity in a conscious state, we have the powerful arguments of many great divines, among which may be named Bishops Jeremy Taylor, Law, and Shurlock, Archbishop Tillotson, and Dr. Samuel Clark.

The Pythagoreans held the doctrine that some sort of body was attached to the immortal spirit, as did also the Platonists, and afterward Irenæus, Origen, St. Austin, and many others. This body the Platonists thought was a sort of luciform body, Αυγοειδες Σωμα. Speaking of these philosophers' tenets, and the resemblance they bore *in some respects* to the doctrine of the resurrection in the sacred Scriptures, Cudworth says, "But besides this there is yet a further correspondence

of Christianity with the forementioned philosophic cabbala, in that the former also supposes the highest perfection of our human souls not to consist in being eternally joined with such gross bodies as these we now have, unchanged and unaltered; for as the Pythagoreans and Platonists have always complained of these terrestrial bodies as prisons or living sepulchres of the soul, so does Christianity seem to run much upon the same strain in these Scripture expressions: 'In this we groan, earnestly desiring to be clothed upon with our house, which is from heaven.'* And again, 'We that are in this tabernacle do groan, being burdened, not for that we would be unclothed (that is, stripped quite naked of all body), but so clothed upon that mortality might be swallowed up of life;'† and lastly, 'Ourselves also, which have the first fruits of the Spirit, groan within ourselves, waiting for the adoption (sonship or inheritance), namely the redemption of our bodies;'‡ that is, the freedom of them from all those evils and maladies of theirs which we here lie oppressed under. Wherefore we cannot think that the same heavy load and luggage which the souls of good men being here burthened with, do so much groan to be delivered from, shall, at the general resurrection, be laid upon them again, and bound fast to them to all eternity. But the same will further appear from that account which the Scripture itself giveth us of the resurrection: and first, in general, when St. Paul, an-

* 2 Cor. v. 2. † 2 Cor. v. 4. ‡ Rom. viii. 23.

swering that query of the philosophic infidel, 'How are the dead raised, or with what body do they come?' replieth in this manner, 'Thou fool' (that is, thou who thinkest to puzzle or baffle the Christian article of the resurrection, which thou understandest not), 'that which thou sowest is not quickened to the production of anything, except it first die to what it was, and thou sowest not that body that shall be, but bare grain,' as of wheat, or of barley, or the like; but God, in the ordinary course of nature, giveth it a body as it hath pleased him, that is, a stalk or ear having many grains with husks in it, and therefore neither in quantity nor quality the same with that which was sown under ground; nor does he give to all seeds one and the same kind of body neither, but to every seed its own correspondent body, as to wheat one kind of ear, and to barley another."* It is not until the immortal spirit of men has been "clothed upon with our house which is from heaven," that we can be said to have a building of God, "an house not made with hands, eternal in the heavens." And this union of man's spirit to an immortal body receives fresh confirmation by the analogy we draw from the union of all other inferior but created spirits with some kind of matter.

It is obvious it cannot come within the scope of my argument to prove what will really compose the resurrection body: the utmost that can be done in treating

* Intellectual System of the Universe, Vol. iv. p. 4, *Birch's Edition.*

this subject, as well as that of the angelic spirits, is to keep close to revelation while we make use of our reasoning faculties to compare what has there been made known on the subject. Our Saviour told the Sadducees (who were one of the Jewish sects that had imbibed some of the Pagan doctrines of Epicurus denying the doctrine of the resurrection), that they quite misunderstood even the Jewish records upon this subject, for in heaven there was not only no marrying and giving in marriage, as among mortals upon earth, but those who were partakers of this resurrection "*were as the angels of God;*" and in those records God expressly says he *is* the God of Abraham,—not he *was.* "God is not the God of the dead, but of the living."* We have, therefore, two facts before us, however obscurely or negatively expressed in this Scripture, to assure us 1st, that the immortal will be very different from the mortal bodies, and 2dly, that out of one or other of these bodies the spirit of man cannot exist, in the sense of being separated from them. First, then, the immortal bodies of the spirit of man will be as the angels; and that the bodies of angels cannot partake of the same associated materials as those of mortal man, may be inferred from the very altered position they are represented as taking as angels. The very light in which these bodies will dwell would consume bodies made like unto those of corruptible men, and therefore we have nothing to lead us to suppose, since "flesh

* Matt. xxii. 30, 31, 32.

and blood cannot enter the kingdom of God," but that they have a body suited to their highly exalted sphere of action. The object is, not to show what those bodies are, but only that they exist in a state different to that we discriminate as mortal; and this is to be implied from the manifest appearance of angelic forms from time to time, and from the description given of heaven in the vision of the evangelist John: for it seems improbable that the beauties of God's celestial empire should be manifested without the material on which to display those beauties; and this material must be so built up as to be incapable of being destroyed by those agents we now regard as destructive to our present bodies.

We have seen how differently, and with what graduated degrees of power, the several spirits we have had under consideration are made to act upon material substances, first uniting them in inorganic bodies by the more complicated modes of union. In contemplating the celestial body which the spirit of man is finally to take up, the mind seems to carry us forwards and upwards to the regions of those spiritual powers still higher and nearer their great source and centre. How safely and rationally may we argue, if the Great Cause of all natural and divine synthesis can, by the aid of the spirit of life, put together in the vegetable creation the exquisite textures, the inimitable shapes, the surpassing colours, as we there behold them, each quality being varied almost to infinity! If to these he can add the more elaborate wonders of animal struc-

tures, which instrumentally seem to be brought about by adding to the number of material elements; and, uniting them by a different process, how surpassingly magnificent must be that body, how immaculately constructed, so as, in a glorified state, to be capable of beholding the face of God in glory!

The very enlarged powers that are given to the angels of God place the resurrection body in parallel, if not with the highest, certainly with some of the angelic hosts. The glorious properties and powers of these stupendous beings, as they have been shadowed forth to us in revelation, will be considered under the head of the Spirit of Angels.

Secondly, that out of one or other of these bodies the spirit of man cannot exist, in the sense of being separated from them. Our Saviour said to his disciples "Except a corn of wheat fall into the ground and die, it abideth alone; but if it die, it bringeth forth much fruit." This expression, together with that of the Apostle Paul, where he tells the Corinthians that which they sow is bare grain, it may chance of wheat, or of some other plant, are the nearest comparisons we have left to us of the glorified body. Though differing so much in appearance and character as the seed does from the future plant, yet we see even here, with the same material elements, but differently proportioned and collocated, what a wonderful change the spirit of life is able to effect in those materials. How it can put together the stem, the leaf, the flower, and the seed, the latter having no kind of resemblance to the three

former. So is it with the resurrection body, which, like the corn of wheat, may lie in the ground, as the chrysalis does, in some quiet place of safety, till the appointed time comes, when it takes up its new position. During all this time, which, in every seed, and in every chrysalis, varies according to God's own appointment, doubtless the spirit of life is retained in contact with the torpid matter, and, as we have shown to be the case in the mummy wheat, this torpid condition may be prolonged to a lengthened period of time. The bodies of the antediluvian have long since crumbled into dust, and, like the dead flowers of the past year, have yielded up their material elements to the dust again. Not, however, before a portion of those very elements has been reserved, into which, for a time, the spirit of life has withdrawn itself. So is it with the spirit of man, which still lies concealed in its immortal seedling, waiting for that glorious resurrection which is yet to take place, when it will again animate bodies of a material contrivance; which, nevertheless, we are led to believe will bear no more resemblance to the former body of man than the seed does to the new-made flower, or the chrysalis does to the gaudy and delicate butterfly. This idea is borne out in several parts of Scripture. When the great Prophet Elisha was buried, his body manifested the presence of his spirit in a most unexampled way, for it will be remembered how, when the Moabites attempted to put one of their dead into the sepulchre of the Prophet, in consequence of touching the bones of Elisha the dead body revived and stood upon his

feet.* When the Witch of Endor called up the body of Samuel it had been dead two or three years. The expression of Samuel to Saul is very remarkable: "Why hast thou disquieted me *to bring me up?*" Bring what up? The dead body, or the spirit. Further on he says: "To-morrow shalt thou and thy sons be with me."† Where? surely not in heaven. When our blessed Saviour was crucified, St. Matthew tells us: "Many bodies of the saints which slept arose and came out of the graves after His resurrection."‡ By these, and other passages, it seems more probable that the immortal spirit of man remains in a dormant state of sleep in some mysterious manner connected with the seeds of his resurrection body. This state is called the sleep of death.§ When Lazarus was dead, Our Saviour said to His disciples: "Our friend Lazarus sleepeth, but I go that I may awake him out of sleep." The disciples "thought that He had spoken of taking of rest in sleep. Then said Jesus plainly unto them, Lazarus is dead."

These new and glorified bodies will be adapted to treat with the "perpetual whitenesses," and to behold the dazzling splendour of light, which must attend the presence of Jehovah in heaven; and how triumphant is the thought such reasonings as these natually lead to, in the mind of the Christian philosopher! when he feels that this immortal body we

* 2 Kings, xiii. 21. † 1 Sam. xxviii. 15 and 19.
‡ Matt. xxvii. 52, 53.
§ 1 Cor. xv. 6, 20, 51; 1 Thess. iv. 14.

are now speaking of, and which we shall one day put on, will be so fashioned as to be incapable of being acted upon or affected by the scorching and ungovernable destruction which then shall rage to try every created thing; that when "all worldly shapes shall vanish" away, this bright and glorious body, the masterpiece of the eternal God, shall remain

> "Unhurt amidst the war of elements,
> The wreck of matter, and the crash of worlds."

It is most true, this immortal body, in which man's spirit will finally take up its abode, to travel through the long vista of endless eternity, will never more be changed or go to decay; but this by no means implies that the resurrection body in all, whether believers or unbelievers, will be similarly placed. The common property of immortality may belong to all, and the power to endure torment, in the mortal sense of the word, without destruction, like asbestos in the fire, may be compatible with the holding together of the immortal structure, as the power to stand in the presence of that vast and inconceivable God may also then be compatible, not only with perpetual existence, but also with endless and indescribable joy.

It is a very popular, but a very mistaken idea, that the old mortal body of the spirit of man will rise again to judgment; but this, it should be stated, is not actually affirmed in revelation. "The hour is coming when all that are in the graves shall hear the voice of the

Son of God, and shall come forth"* to receive judgment for things done in the body. These are the words of our Saviour. St. Paul, in another place, describes this change to be instantaneous when the last trump shall sound and the dead shall be *raised incorruptible*, and we shall be changed. These two passages are to be reconciled upon the supposition above stated, that the spirit of man reposes asleep (or dormant, as we see the spirit of life rests in the seeds of vegetables — an analogy actually applied by the Saviour and St. Paul†) in the grave to which is attached the immortal seed which is at the sound of the trump of God to spring up out of the grave. It will be remembered, St. Paul, in his description of the resurrection, tells us that God will give to every spirit of man that body that seemeth best to Him: "It is sown a natural body, it is *raised* a *spiritual* body.‡ That which we sow in the ground, we sow not that body that shall be. According, also, as we sow so shall we reap; and this would seem to imply that the resurrection body is fixed in the immortal seed in which the spirit of man reposes in the grave. When this seed bursts forth into the resurrection body, they that have done good will rise with an immortal and also a glorious body; they that have

* John vii. 28; 1 Cor. xv. 52.

† John xii. 24; 1 Cor. xv. 37.

‡ 1 Cor. xv. 44. In this particular quality the spirits of life and of man may be alike, differing in this repect only in degree.

done evil will rise also with an immortal body, but it will be to be consigned to the power of Satan. In the parable of the talents, the coming of the Son of Man in his glory, as at the resurrection day, is represented as separating the good from the evil, placing the one on his right hand and the other on his left;* and inviting the one to enjoy the kingdom prepared for them, while the others are cast into the regions of Satan. According as the prophet Daniel expresses it, "and many of them that *sleep in the dust of the earth* shall awake, some to everlasting life, and some to shame and everlasting contempt."† The resurrection body will therefore take its position according to the nature of the seed with which the spirit of man has been associated. And as it has been sown so will it rise; but when once it rises it must be either to an immortality of happiness or of misery. The immortal bodies of unpardoned sinners are represented as not standing before the judgment in the same congregation as the righteous.‡ There is another passage in Job which, as our English version renders it, inclines to the belief that the present body will rise to behold the face of God. "And *though*, after my skin, worms destroy this *body*, yet in my flesh shall I see God."§ This verse our margin has better rendered thus: "After I shall awake, though this *body* be destroyed, yet out

* Matt. xxv. 31, 32, 33. Compare this with Ps. i. 5, 1 Kings, xxii. 19.

† Dan. xii. 2. ‡ Psalm l. 5. § Job xix. 26.

of my flesh shall I see God." And thus we get rid of a difficulty that is otherwise most conflicting to such passages as those that go to prove that the resurrection body will not be flesh and blood. The Hebrew particle מ, *mem*, which is translated in our English Bible "*in* my flesh," should be more properly rendered *out of* or *beyond*. And this would enable the patriarch to utter a prophecy more consistent with other portions of divine revelation upon so important and interesting a point.

CHAPTER XI.

THE SPIRIT OF ANGELS.

We are now about to treat of a class of spirits whose powers are yet more exalted than those of the spirit of man. The question of the existence and the agency of the spirits of angels is one to be resolved solely by revelation. Reason furnishes no material on which to ground either a belief or disbelief in this doctrine, seeing it is one so entirely irrespective of all those properties of external nature presented to the mind in the visible world, and of all those intellectual and moral operations of the mind with which reason has to deal.

Existing, as the angels are supposed to do, beyond the sphere of human sense, it will at once be obvious that any facts immediately relating to the nature, qualities, or offices of such beings, must be derived from that source which has been given to us that we may become informed upon such subjects as are above the reach of our natural faculties to determine. It is true, the existence of angels having been made known to us first through the Scriptures, it is not inconsistent, by a parity of reasoning, to suppose they exist, from the graduated scale of creation we witness in the creatures inhabiting our own earth, which leads us to

infer the created powers above us advance by regular progression up to the great source of all knowledge and power. "We know, indeed, that beings appear to exist in an interminable series, descending from ourselves downward until they reach the verge of nothing. But the probability arising hence is, that there exists a corresponding series of beings on the ascending side of the scale; and none will deny that between us and the Deity there is ample room for all the possible orders and varieties of rational existence. So far, then, the appearances of nature are in favour of the doctrine of angels and spirits."* Thus, Plato taught, as there were gradations in the ranks of men, so were there like gradations among the angels. *Ut enim homo homini sic dæmon dæmoni dominatur*: and arguing in a descending scale, as some men were inferior to others both mentally and physically, so among brutes we observed a similar relation of degree: *tanto meliores hominibus, quanto hi brutis animantibus.*†

The knowledge we possess of the angelic hosts, and the powers they are capable of displaying, are wholly derived from the pages of inspiration, where we may gather much to instruct us on those points that relate to their numbers, their powers of strength, swiftness, and intelligence, their duration, &c., that must at once convince us that, as created beings,‡ originally the

* Notes on Sermons delivered by the Rev. Robert Hall, M.A., taken by the Rev. T. Grenfield, M.A.

† Plato in Critias.

‡ Col. i. 16; Heb. i. 4.

inhabitants of the highest heavens, they were endued with qualities and attributes which must have transcended far above those bestowed upon man in his human capacity.

Scripture informs us these elevated beings were created by Jesus Christ for the fulfilment of His own purposes, and as those purposes have not been revealed to us beyond what is implied in those passages of Scripture, where the offices and attributes of angels* accidently transpire, in the particular position in which we are brought to observe them, it will be obvious that much that belongs to them as they stand related to the countless worlds we include under the general name of heaven, must continue to remain unknown to us. And this is the more probable, seeing that all we at present know of such beings is derived from a source that is above the power of the spirit of man to penetrate. Nevertheless, revelation has led us rightly to infer many facts relating to the angels, which undoubtedly prove to us that there are great degrees and diversities of power in these beings, and that they are composed of distinct orders. In many parts of Scripture they are variously called holy angels, angels of light, angels that excel in strength. And they are symbolized to us under titles most variable and difficult of exact interpretation, being described in

* The word Αγγελος, according to Austin, is "a name not of nature but of office." It simply means a messenger, and in this capacity it is we have the opportunity afforded us of learning what are some of the high attributes of these exalted beings.

some instances by their mere abstract qualities, and in others by terms that shew that both the quality, and the cause producing that quality, reside in them. Of such a character are the words thrones, Θρονοι;* dominions, Κυριοτητες; † principalities, Αρχαι‡; powers, Δυναμεις; § authorities, Εξουσιαι; ‖ living ones, Ζωα.¶

* This word may, according to the Greek etymologists, come from the word θραω, to sit, and may imply that some orders of angels display their powers, not as others do by rapidity of movement, but by being stationary.

† An abstract term, being used for a concrete, and implying a magisterial or civil authority.

‡ This is also a word often used in the concrete sense for the persons or beings in whom this particular power is lodged, as well as the power itself. It is difficult to fix the precise meaning of this word. Christ himself is called Αρχη (Rev. i. 8, xxi. 6, xxii. 13). It may have to do with their relative position.

§ An Attic word, put for δυναμεις, expressive of some great power that might be termed miraculous, regardless of its application to good or evil. In 1 Cor. i. 24, the word δυναμις is put for a title of Christ, Χριστὸν Θεου δύναμιν καὶ Θεου σοφίαν. Christ, the power of God and the wisdom of God.

‖ Possibly an inferior authoritative power, and, as it may be for good or evil, the latter power may be intended.

¶ Occurs in Rev. iv. 6, 7, 8, 9, where it is rendered beasts. But beasts cannot be in heaven; the word relates to some exalted power resembling the phenomena of life, but far higher. The expression γέμοντα ὀφθαλμῶν ἔμπροσθεν και ὄπισθεν, full of eyes before and behind, is intended to show that these angels have the most extensive and untiring power of vision. The title of these kind of angels may be, from the description of their attributes, like the cherubim and seraphim, while those we have been considering may be descriptive of their duties or office.

The words seraphim (Hebrew *sheraphim*)* and cherubim, Χερουβὶμ,† are, together with that of *eloim*,‡ more difficult to understand.

These are the mighty beings that composed that vast assembly that the prophet Micaiah beheld when he "saw the Lord sitting on his throne, and all the host of heaven standing by him on his right

* Occurs in Isaiah, vi. 2, where it denotes a kind of angels around the throne of God, each of which had six wings. The meaning of the word is "burning ones," full of fire, and may denote their power to resist that destructive agent.

† This word, which occurs once in the New Testament (Heb. ix. 5), is found often in the Old, and is there not intended to convey the idea exactly of a created angel, but, some think, of the Trinity. It represents a power in some senses higher than the angels. It is, however, a word greatly obscured, and of the most doubtful meaning.

‡ The word rendered in Job, i. 6, sons of God, has been by some thought to mean those men who worshipped or obeyed the true God, and it is the same Hebrew word, *benai haeloim*, which occurs at Genesis, vi. 2. It occurs, however, also in Job xxxviii. 7, and here it is impossible to believe the word applies to man, the subject spoken of being the laying of the foundations of the earth. The time, therefore, must have been before the creation of man, and the beings spoken of must have been angels. The word is put for judge, or magistrate, and is very variously rendered in the English translation. When our Saviour told the Jews to refer to their own law in proof that they were gods, he alluded to that passage in Psalm lxxxii. 6, Exodus, xxii. 9. When David says, God standeth in the congregation of the mighty, he judgeth among the gods, he doubtless intends to show the exalted power the Creator possesses over the highest angels.

§ 1 Kings, xxii. 19.

hand and on his left."§ These formed the numerous company of heaven that composed the ten thousand times ten thousand and thousands of thousands of angels whose voices the Apostle John heard in praise of God. Speaking of their numbers, David says, "The chariots of God are twenty thousand thousands of angels;"* and in other parts of Scripture they are represented in great numbers as ministering unto God.† When the Lord came from Sinai, he was accompanied with ten thousands of his‡ saints. In other Scriptures their numbers are spoken of as countless.§

The personality of the angels cannot be denied; for they are spoken of as having some kind of body attached to them; and there can be no doubt that in heaven, when in the presence of the Great Jehovah, they all have some kind of body to which their spirit is appended. This fact is sustained by the analogy of every created thing. As the spirit of man is united to a material body in the production of the phenomena of life and mind, and, in the final separation from this mortal body, will again be reunited to one destined to carry that spirit through the interminable ages of eternity,—so doubtless are the spirits of angels united to some kind of body which is so prepared and endued as to be able to display the higher attributes, and to endure the more powerful agents they are appointed to deal with. That these angelic bodies must be very

* Ps. lxviii. 17. † Dan. vii. 10.

‡ Deut. xxxiii. 2; see also Jude xiv.

§ Heb. xii. 22.

different in character and composition from those we are in the habit of considering as the corporeal tenements of the spirit of man, needs no argument to prove. But that there must be some kind of body in which these higher attributes are to be manifested is obvious; for we cannot suppose those glorious appearances descriptive of the angels and of heaven can have any meaning in a bare abstract spiritual sense apart from some kind of material utility. Their faces are said to shine as the light; but as mere spirit they could not shine at all; they could not be even visible or light, unless they blended their high spiritual nature with some bodily nature that is best fitted to entertain it, or to transmit it. The very glories of heaven must partake of this mysterious union, or we must suppose part of God's creation differs from all the rest; and the most powerful argument we can use—viz. the uniform, intimate, and dependent connection of the entire creation in proof of the existence of God, both material and spiritual,—is thus shaken to the foundation.

And why should the matter of our globe, whether organized or not, be thought to be the only matter in the universe? and, if so, what forms the material elements that constitute the bulk of countless worlds that move in the celestial cycles of the universe? Whereas, to say that man or the angels in an immortal state have bodies, is to say nothing concerning their nature or relative proportions. They cannot be put together as flesh and blood, for we are distinctly told such gross material cannot enter the presence of God; and if

these angelic bodies are put together in a manner different from any mode of union or collocation we can recognise in our own world, this fact is implied in the strongest manner from the very different attributes and powers with which they are to be distinguished in the account we receive of them in revelation.

The Spirit of the Holy Angels.

The immediate presence of God is represented in the Scriptures as being impossible of approach by man in his mortal state; and his contemplation of the stupendous majesty of God is only to be realised when his mortal body shall have put on immortality, or, in other words, when he has received a glorious body according as it seemeth best to God. In this state he will resemble the holy angels in all those great qualities necessary to their pre-eminent dignity. The angel that appeared to Zechariah in the temple said to him, "I am Gabriel, who stand in the presence of God."* St. John, in a vision, saw the four living angels round about God's throne "that were full of eyes before and behind."† And Isaiah, in the year that King Huzziah died, in the same manner "saw Jehovah sitting upon a throne, high and lifted up, and his train filled the temple. Above it stood the seraphim, each one had six wings."‡

How vastly and almost infinitely do these seraphic beings transcend the same qualities in man, will be

* Luke, i. 19. † Rev. iv. 6. ‡ Isaiah, vi. 1, 2.

gathered fromthe few accounts we have given us of their powers. How closely do these immediate attendants upon the most High God resemble, in some of their attributes, the wonderful Being whose commands they execute, whose honour, glory, and might they constantly shew forth. But though their rapid movements, their power, and their intelligence, are so immeasurably above the same qualities in man, yet when compared with the great Jehovah these attributes even are limited.* The attributes of these exalted beings surpass our comprehension, even by the use of comparisons we borrow from the same qualities exhibited by man in so inferior a degree. We can hardly believe that the slow motion that marks the progress of man in all that he does, can be carried out by the holy angels to such an extent as to make their *movements* to seem quite independent of time or space: hence they are metonymically described as being covered with wings. The appearance of the angel Gabriel before Daniel, while he was in the act of prayer† before God, shows that in an incalculably short space of time this messenger of God, who stands in his presence, must have left the heaven of heavens, where God dwelleth, in order to visit the prophet and to give to him "skill and understanding;" to accomplish which he must have travelled infinitely faster than light is supposed to do in its passage from the fixed stars. The slightest reflection is sufficient to convince us that the most gigantic computation of the movements of

* 1 Peter, i. 12; Matt. xxiv. 36. † Dan. ix. 21.

bodies so constituted as those we see around us would be inadequate, "though favoured by the duration of eternity," to accomplish so vast a labour as that of travelling through the immensity of the created universe. "Our imagination cannot seize on a celerity adequate to the task of travelling the space between the opposite extremities of that portion of the creation which has come within the cognizance of man. The velocity of the earth, though rated at sixty-eight thousand miles an hour, would be sluggish and unsuited to the requisite progress of such a journey. Even the swiftness of the comet which was calculated by Newton, though thirteen times as great, would be still insufficient. Eight hundred and eighty thousand miles an hour would not enable an inhabitant of the sun to visit his neighbours, Sirius and Arcturus, in a shorter period than four or five thousand years, nor the extremity of the milky way in less than the little eternity comprised in two millions; and still there are numerous and distant nebulæ rising on his view, and each of them estimated as a universe equal to that which surrounds us. How many of our years must we travel with the speed of a comet to light upon their confines? Forty millions of years."*

All this inconceivable immensity does but convince us we shall with glorified bodies have nothing to fetter our true apprehension of the glory and unity of creation, when we shall behold it and compass it as it were with

* Carmichael on the Destiny of Man.

a glance. Time and space will then give way, when we see the majesty, the splendour, the greatness of our God, as he will then be all in all.

We have some anticipation of what this power will be, however faintly portrayed, in the instantaneous operation of thought as it spans synchronously innumerable objects even to the utmost limits of created matter. How strongly does the Psalmist contrast man's finite powers with the infinite power of God, even when he would attempt to escape his presence by rapidly moving from one part of the earth to the other, or from one boundary of the creation to the other. In the highest poetical strain, he breaks out, "Such knowledge is too wonderful for me, it is high, I cannot attain unto it. Whither shall I go from thy Spirit, or whither shall I flee from thy presence? If I go up into heaven, thou art there; if I make my bed in hell, behold thou art there also. If I shall take the wings of the morning and remain in the utmost parts of the sea, even there shall thy hand lead me, and thy right hand shall hold me."*

The *power* of the angels is almost as incomprehensible to us as their rapid movements. They are represented in Scripture as excelling in strength.† Here we read of one angel destroying seventy thousand men in three days;‡ and of another angel who in one night slew a hundred and eighty-five thousand men out of Sennacherib's army.§ And in the execution of God's

* Psa. cxxxix. 6—10. † Psa. ciii. 20.
‡ 2 Sam. xxiv. 15. § 2 Kings, xix. 35.

future vengeance upon our earth, they are represented as having power over the elements of matter, and even the fierce spirits of devils. In The Revelation* an angel is exhibited as binding that powerful of all fallen spirits, "the prince of the power of the air;" as "casting him into the bottomless pit, and setting a seal upon him."

How astonishing also must be their *intelligence!* They are described in Scripture by those comparative expressions which imply the immensity of their understanding and intellectual ardour. Though permitted to enter into, to behold, and to enjoy the glories of the vast eternal empire of Jehovah, yet they are never wearied or exhausted, their youth and vigour is still and ever the same throughout eternity. Figuratively speaking, they are "full of eyes within," that is, having all their knowledge, attention, consciousness, and every other attribute, so much enlarged as to grasp simultaneously and unceasingly the entire range of God's creation, not only as regards its grandeur, its immensity, or its outward beauty, but also as regards his manifold wisdom in its creation and government, and the true comprehension of truth and love.

If it is thought that these and many other high qualifications descriptive of the angels, imply that such beings are purely spiritual, and have no kind of body attached to them, we have not only the argument already used, in speaking of man's resurrection, but the evidence of Scripture is also against such a supposition, for there we find that those angels which have appeared to man have all had some kind of body

* Rev. xx. 2.

attached to them. The angels that appeared to Abraham* not only talked with him, but ate food. The angel that preserved the three children in the fiery furnace, whose form was like unto the Son of God,† must clearly have had a body, or the king could not have recognised it. The angel that appeared to Manoah's wife, and afterwards to him in the field with her, undoubtedly had a body, and that body must have had some of the characters of the human body, or they would not have offered him meat.‡ When Elijah was under the juniper tree an angel *touched* him twice, and talked to him.§ In the matter of David's numbering the people, when the plague fell upon Jerusalem, David was by the threshingfloor of Araunah, and "he lifted up his eyes and saw the angel of the Lord stand between the earth and the heaven, having a drawn sword in his hand, stretched out over Jerusalem. And the Lord commanded the angel, and he put up his sword again into the sheath thereof."‖ So likewise the Angel of the Lord that appeared to the two women at the sepulchre is described as "rolling back the stone from the door, and sitting upon it."¶ And not to mention other occasions, as when the angel appeared to Zecharias,** to the shepherds,†† to our Saviour in the Mount of Olives,‡‡ to Peter when in prison, &c., we are fully assured they must have been provided with some kind of body.

* Gen. xviii. 8.
† Dan. iii. 25.
‡ Judges, xiii.
§ 1 Kings, xix. 5.
‖ 1 Chron. xxi. 16, 27.
¶ Mat. xxviii. 2.
** Luke, i. 11, 12.
†† Luke, ii. 9, 10.
‡‡ Matt. iv. 11; xii. 7, 8.

On the other hand, there are angels spoken of in Scripture that appeared not to the outward senses of those to whom they were sent.* And that this was an incomprehensible attribute in them, but not the less true on that account, is remarkably shown in the case of Balaam, where the angel of the Lord was seen by the ass in the first instance, and not by the prophet.† The circumstance, therefore, of the bodies of those angels we read of in Scripture, who were sent from God, and who were placed in some sort of communication with man, though not visible to him, may receive an explanation that does not disturb the fact of their having all bodies of some kind. But for moral reasons, or for reasons connected with the trial of faith, it might have been necessary that in some instances these angels should not be visible; thus the witch of Endor first saw Samuel when Saul did not.‡

This attribute of the angels, of being bodily present though invisible to the human eye, is a power they receive from God. Our Saviour made use of it on several occasions, both before and after his crucifixion, even to conceal his humanity.§ And in his warning to his disciples, our Saviour, speaking of the importance and duty of regarding little children with kindness and humility, says, "For I say unto you that their angels do behold the face of their father which is in

* Gen. xxii. 11. Here the angel called to Abraham out of heaven. xxiv. 7; 2 Kings, xix. 35; Dan. vi. 22.

† Numb. xxii. 22—31. ‡ 1 Sam. xxviii. 12—14.

§ Luke, iv. 30; John, viii. 59; x. 39; Luke, xxiv. 31.

heaven."* The holy Psalmist also tells us, "The angel of the Lord encampeth *round about* them that fear him, and delivereth them."†

And this is an attribute that should not be lightly touched upon, seeing it is so extensively made use of by the fallen spirits to the destruction of man's happiness and his hopes. On the power of this attribute, as it is used by the great adversary of the spirit of man to entrap him, I shall speak more fully in the next chapter. Here it is important to dwell more upon the general qualities of angelic power, with reference to the good of man; for their lofty powers and transcendently happy spirits are revealed to us for encouragement, and their disinterested love and joy over all the concerns of men which relate to the prospect of their final happiness‡ in the presence of God, are truly animating incentives to resist the power of Satan with those means which revelation has placed within our reach. By showing us what must be the superiority, both in strength and depth, of their intellectual capacities, they remind us of the awful nature of those capacities,—how readily they could, if permitted by God, employ them for the enlargement of his understanding and the more deep and glorious comprehension of the divine perfection. But upon no occasion can we gather in the sacred records any authority to suppose the astonishing power of the spirit of angels has been permitted to

* Matt. xviiii. 10.

† Psa. xxxiv. 7; see also Psa. xci. 11, 12; Matt. iv. 6; Heb. i. 14; Dan. vi. 22.

‡ Luke, xv. 7.

exert itself in regulating the affairs of man, or influencing the destiny of his spirit.

This point is very important to be borne in mind, for it is remarkably in keeping with the commands so implicitly laid down by God in that law which was to be a guide to his chosen people, in the midst of a world that had been usurped by a fallen angel. It had been from the fall of man attempted to graft the power of this fallen angel upon the spirit of man; but God saw the injury it would effect, in allowing so powerful a spirit to act upon the delicate framework appropriated for that spirit of man that was designed, at first, only to know God in the countless wonders of that part of his creation which is confined within the limits of those faculties it was made to treat with. Accordingly, God denounced in that Law all those acts which implied that a higher spiritual power was acting upon the mind of man, which spiritual power had not been imparted by God. Among these, the practice of witchcraft, sorcery, charming,* and all other attempts to exert a supernatural influence over the mind of man, in that it was an attempt to usurp those attributes which alone could be wielded by God in connexion with man, were denounced as in the highest degree sinful. God knew what would be the end of such spiritual operations if employed by one whose deep enmity to the human race had already been so fearfully displayed. He knew how it would excite

* Exod. xxii. 18; Lev. xix. 26. 31; and xx. 27; Deut. xviii. 10—12; Isaiah, viii. 19; 1 Sam. xxviii. 3, 9.

the spirit of man to envy and discontent, and therefore he wisely put the heaviest judgment upon those who acknowledged his own power, while they practised the arts and trusted in the power of a fallen angel.

While, then, the power of angels cannot be denied, it is important to bear in mind that whenever such is produced, as by ordinary means, it is not by any natural process of the human mind; and the individual manifesting this supernatural power is either doing so by Divine inspiration, or by a power that is acting in opposition to the spirit of God.

It is not unreasonable to suppose that the exhibition of a power so great as that of angels, when manifested, as if ordinarily, through that organization intended for the operation of so different a spirit as that of man, would be contrary to Divine appointment, since it must lead to a feigned resemblance of Divine power, and would thus be calculated to mislead the human mind into the belief that it was from God. It was for this cause that the Creator has ever been distinguished by all His works, as well as by those laws that he made to govern them, as the unchangeable God.

Nevertheless, that God might be known in the government of the world, as that Being whose power transcends, that of angels, He has from time to time made it known, through his prophets, by supernatural means, yet always in such a manner as to insure conviction to the human mind as to the source whence it it is derived. It was not a power lightly handled, or displayed upon ordinary or unimportant occasions; on the contrary, it may be almost supposed the power

would never have been made known to man had he passed though the present dispensation in his original state of purity and innocence. And therefore it was in order to counteract the evil effects of the spirit of fallen angels, that He manifested any supernatural power at all. By comparing what is said of the great prophets of God in the Scriptures, and examining the many wonderful acts they performed, we are able to detect many superior qualities in the operation of their minds. These qualities are very distinct, and by their instrumentality the prophets were able to speak of past events beyond the power of tradition or the memory of man to impart. They would see also into the future, and that, apparently without the instrumentality of natural objects to direct them.* They could deprive natural bodies of their ordinary qualities,† and they could command the spirits of life and of men to return to the dead body they had left.‡ Such qualities as these are identical with those that at an earlier period of the world were manifested by those angels that were sent from God. In all these operations we see a power displayed alike in kind, though not in degree, to that of the fallen angels, and the same power is recognised in the close resemblance the magical operations of the sorcerers bore to that which was placed in Moses. The only difference was in degree, and hence the magicians failed to do all by their incantations which Moses did by the spirit that was in him.

* 2 Kings, viii. 1; 1 Kings, xvii. 1.

† 2 Kings, vi. 6.

‡ 2 Kings, iv. 35.

CHAPTER XII.

THE SPIRIT OF ANGELS.

The fallen Angels, and the operation of their Spirit upon Mortal Bodies.

In speaking of the brain as the organic instrument through which the spirit of man was designed to communicate with God's creation, as far as this globe is concerned, and so to draw undoubted evidence of the truthfulness of such further knowledge as it has pleased Him to reveal to man, I was anxious to prove that neither the brain, nor its phenomena comprised in the mind, were really the spirit of man, but only a mode of action which was designed for the use of the spirit of man. This exquisite piece of divine mechanism was, however, most injuriously assaulted by a spirit that was far more powerful than the spirit of man, even before the fall; and this demoniacal spirit so far succeeded in injuring the human mind, that in order to save the spirit of man from being carried away captive, the wisdom of God sent His Holy Spirit to the rescue. As an instrument of perfection to act faultlessly, and without any deviation from what God had made in the first instance to act with strict relation to truth, its injury was irreparable; and this fact puts

the office of a mediator between God and man in its true position.

We have now, then, to contemplate man as a mortal being, in whom the cause of this injury has been brought to bear upon his mind, and through this, upon his body, with a view to its destruction, and so to the final carrying away of his spirit from the presence and joy of its Creator.

I shall not stop here to inquire whether this power to produce death is a mere *principle of evil*, or whether it is a real being. There is the most abundant proof from revelation that the cause of evil and of death is personated in Satan, or the devil. This is a doctrine not obscurely hinted at, but one that pervades the Scriptures in every part. While, therefore, his *existence* is disputed by a very small section of the human race, his *ubiquity* may be with more reason doubted. The frequent occurrence of the word devils in Scripture has misled many into the erroneous supposition that there are many beings comprehended under this title. But the word translated devils, is strictly rendered demons (Δαιμονες),* and as such ought not to be regarded otherwise than as angels, and that not abstractedly as fallen angels, but only so in reference to the context. Of these demons or angels of Satan there must be countless numbers; but they are always

* This word we probably first obtain from Hesiod. It was by him used to express an office to which, after death, mortals were promoted by Jupiter as keepers of mortal men. Plato afterwards used this word, and applied it to those who attained great honour

distinguished from their prince or leader, who controls and uses them for the carrying out of his purposes. He is called "the devil," and they are called "his angels." The power possessed by Satan over the entire race of mankind is undoubted. "We know," says St. John, "that the whole world lieth under the wicked one." In other Scripture the devil is recognised as "the prince of the power of the air;" and this latter expression is doubtless intended to shew man what is the extent of Satanic agency when uncontrolled by the still more powerful Spirit of God. His existence, therefore, is not a question of uncertainty, nor to be denied by Christians, as it was by the Sadducees,* the peripatetic philosophers, or by the followers of Epicurus. Among the Pagan philosophers who believed in the existence of spirits, may be mentioned Socrates, Pythagoras, Plato, Plotinus, Porphyrius, Proclus, Zeno, Epictetus, Seneca, and many others.

One of the immediate effects of this spirit upon man's mind was to give him the knowledge of good and evil.† He was, by partaking of the forbidden fruit, to be admitted to the rank of gods; and truly did he attain to this supernatural knowledge, which was contrary to the wish of his Creator. It was, indeed, to make him a god, but this god was a fallen angel.

The spirit of evil, as I have termed it, which is a

and dignity. Nor was it a term applied in an evil sense till the commencement of the Christian era. See Duport on Theophrastus' work on the Moral Character of Men.

* Acts, xxiii. 8. † Gen. iii. 5.

fallen angelic spirit, has, then, been permitted, doubtless for most wise and glorious reasons, though to man they are in his present state inscrutable, to enter the field of the human mind. And his chief mode of attack has been marked by two very different but characteristic forms or methods, that will be presently pointed out.

It is not necessary to suppose the operation of this power is confined to the personal presence of the devil. Though there is not a scene of wickedness or vice in the whole world, or a thought of envy, anger, or malice, in the mind, in which Satan is not the cause; yet this is not to say he is present to the individuals so acting otherwise than by his agents or emissaries. It is not necessary for the carrying out of his power, awfully great as it is, that the devil should be invested with the "essential incommunicable omnipresence of deity." Nothing is more common in the use of language than to attribute to the principal or leader that which is done by his authority or influence, and thus the operations of thousands are referred in the Scriptures to a power not necessarily always present as the true cause.* We witness this in the government of earthly monarchs, and it is doubtless caused by the more powerful nature of the being operating upon the properties of those bodies that are inferior.

The first form of Satanic attack was necessarily adopted at the period of the Fall, when the whole race

* See, on this point, Notes on Sermons of Rev. Robert Hall, by Rev. T. Grenfield.

of man was involved; and in this attack doubtless the mind was in the first instance preliminarily disposed by the supernatural agency of this power operating in some more than in others, to that state which is distinguished by the loss of power over the attributes of the intellectual faculties and feelings, and which constitutes the mental cause of sin. This was the mode in which we find the spirit of evil first involved the human mind; and this state, when deprived of the power to act correctly or voluntarily, is recognised by the title of insanity.*

The second method, which is probably, in the order of time, the last attack that this spirit has hitherto made upon the human mind, may be recognised in those poor creatures, the demoniacs mentioned in the Scriptures. I shall consider each of these in the order in which I have named them.

First, then, we notice in revelation the effect the spirit of evil had generally upon the human race. By leading the mind away from God and the contemplation of His perfections, it gradually became doubtful and unbelieving, envious, selfish, arrogant, self-willed, sensual, and corrupt: so that it quickly gave birth to tenets and opinions that struck at the power and authority of God, and carried the mind away into the practice of idolatry, or a degraded system of polytheism. This

* Although, both in a scriptural as in a pathological sense, that mind is especially unsound which is habitually under the power of evil, yet insanity is a term more strictly applied to acts that are not capable of being distinguished by the individuals producing them.

was the effect of the first throw of the spirit of evil at the human mind; also to lead the mind to seek of some pretended deity that knowledge of future events which the evil spirit had excited. And now, by so injuring the mind in the employment of its natural faculties and powers to so abusive and unnatural an extent, it was prepared to be deceived by the power under which it had been enlisted and enticed; and, to insure the continuance of man's subjection to the authority of this spirit of evil, it commenced exercising its demoniacal, and therefore supernatural, power in the performance of all those wonder-striking and miraculous acts we read recorded of those who were said to be possessed of a spirit of divination or a spirit of charming or of necromancy.* This was highly flatter-

* The different kinds of divination which have passed for sciences admit of ten divisions. But we may now enlarge the number with safety, and, as I hope presently to show, the *science* of mesmerism should undoubtedly be ranked among them. These are—1. Aeromancy (divining by the air). 2. Astrology (by the heavens). 3. Augury (by the flight and singing of birds). 4. Chiromancy (by inspecting the hand). 5. Geomancy (by observing the cracks or clefts in the earth). 6. Haruspicy (by inspecting the bowels of animals). 7. Horoscopy (marking the position of the heavens when a man is born). 8. Hydromancy (by water). 9. Pyromancy (by fire). 10. Physiognomy (by the countenance). This last term is not to be understood in the sense Lavater has attached to it, but simply as a method of divining by the countenance, which the sorcerers could do. There are nine different kinds of divination mentioned in Scripture. These are—1. Those whom Moses calls *Meonen*, from *Anan*, a cloud, Deut. xviii. 10. 2. Those whom the

ing to the human mind, to think it could, by such a power, possess an insight into the nature and operation of things otherwise intended not to be known by man. "When the woman saw that the tree was good for food, and that it was pleasant to the eyes, *and a tree to be desired to make one wise*, she took of the fruit," &c. This was evidently known to the Prince of Darkness as the most likely and the most attractive motive for inducing man to join his banners. Accordingly the after-history of his destructive conquest over the spirit of man fully satisfies us how much he knew, and with what skill he applied his infernal knowledge. The same desire to become wise above that which our natural faculties can make us, or above that which the Spirit of God has revealed to us, is the secret spring that is ever at work to draw man from the service of God to the service of Satan. It gives the true explanation of all those wonder-seeking methods resorted to by man in every age of his career, through which he attempts to emulate his Maker, and to exalt himself in the eyes of his fellow-creatures. That this was a great

prophet calls in the same place Menacheseh, which the Vulgate and the generality of interpreters render *Augur*. 3. Those who in the same place are called Mecasceph, which the Septuagint and Vulgate translate "a man given to its practices." 4. Those whom in the same chapter, verse 11, he calls *Hhober*. 5. Those who consult the spirits called *Python*. 6. Witches or magicians, called *Judeoni*. 7. Necromancers, who consult the dead. 8. Such as consult *staves* (Hos. iv. 12) called by some *Rhabdomancy*. 9. Hypatoscophy, or the consideration of the liver. See Buck's Theological Dict., art. *Divination*.

power in the hands of Satan, and emanating from him, no one can doubt when they read in Scripture what it could accomplish: how it imitated in the most astonishing manner even the power of God's spirit while resting upon Moses in the case of the Egyptian plagues. Opposed to the argument employed by some, that these diviners and enchanters were little more than mere fortune-tellers or dealers in natural magic, we have the fact of their being the agents of some extraordinary power that was put in array against the majesty of heaven acknowledged in the prohibitions and judgments of the law which related to such practices, as well as in the marks appointed by Moses for discerning a false from a true prophet.* The titles there given to such as pursued these hidden practices are too unmistakeable to lead us to suppose the practices followed by such persons were either marked by immoral acts, or that they were mere jugglings or sleights of hand; for in the Scriptures they are plainly identified and denounced as the work of some great evil power. The term "familiar spirit" is a very remarkable one, as branding the power at once with a title that neither marked the character of God's supernatural dealings with man, nor of that spirit he had placed in him. To suppose, also, that this power was one limited to the mere "trafficking with idols,"† or only displayed in the administration of poisonous drugs or noxious vapours, is

* Deut. xiii. 12.

† Scott's Demonology, Letter II. p. 54. This was the belief of Hippocrates and Avicenna, Wierus, Holbrenna, Cælius, and many others.

to overlook countless acts spread over very many years in the eventful history of man, which too plainly declared they were the operation of some spirit more powerful than that which ordinarily acts upon the mind of man.

From the time when Joseph stood before Pharaoh, and probably much earlier, down to that when the damsel at Philippi cried out to Paul and Silas, "These men are the servants of the most high God," we have the highest authority for believing this particular demoniacal power constituting the first form in which it manifested itself in the bodies of men, was permitted to exert its deadening influence.

That it was a power able to see into the operation of events which bore no connexion with those only to be deduced by a rational sequence is most certain, while by this very power the mind of the bystanders, or those present, was attracted and misled. The girl at Philippi, that "brought her masters much gain by soothsaying," was probably the only person amongst those who followed the apostles who knew they were really sent from God. But how could she come by this knowledge, in the midst of her daily drudgery in the service of Satan? It could not be by human power. It was not likely to be by the power of the holy Spirit of God. There was, then, no other power than that of the master whom she served by which she could obtain this knowledge.

It should be also noticed that the apostle used the same means for expelling the spirit of Pithon in this damsel as was resorted to by them for expelling the evil spirits in those said to be possessed by the devil:—

"I command thee in the name of Jesus Christ to come out of her."

The effect this power had upon the heathen nations of the world, in sweeping myriads of the human family down the gulph of pagan idolatry, and the effect it has upon the moral and physical constitution of man, is shewn in the many millions of our race who to this day are under its dominion, and in the vast numbers who are afflicted with mental and bodily diseases that have shortened the span of life within the narrowest limits.

The astonishing power of the spirit of evil has, at different periods of the earth's history, been so awfully manifest, that it is well to consider such a power in all its bearings; comparing its past history with that which revelation, for our guidance and warning, has made known to us as its future characteristics.

There are few in the present day who can realize that wonderful power that enabled the enchanters before Pharaoh to turn their rods into serpents, and their river into blood; but unless the word of God fails,—and our Saviour tells us that heaven and earth shall pass away sooner than that one iota of that word shall fail,—we shall yet see a more awful display of this demoniacal power than it has ever before exhibited. Such a power as will be able to give life and speech to a mere image or idol, and to call down fire from heaven,* and perform many miracles in the sight of men, is one

* See Rev. xiii. 13, and compare it with chap. xvi. 2; 2 Thes. ii. 9; also Rev. xix. 20, and xx. 4. These passages are yet unfulfilled.

even more dreadful to contemplate than that which drove so many poor sufferers to demoniacal distraction.

It excites alarm in the mind of the experienced christian, knowing as he does that the power of Satan is yet to be more awfully developed, when he sees the revival of so many deceptive arts practised daily upon the minds of credulous and unthinking persons.

A more and more correct knowledge of the properties of matter must, as science advances, help to narrow the real power of witchcraft; and to some this particular form of demoniacal power would seem to be thought exclusively to be confined to palmistry and the art of natural magic. But this is not in keeping with the most indisputable evidence, and that independent of the authority of revelation, that there is a spiritual power at work which is above the capability of natural science to explain. Doubtless there are and have been many pretended operations of supernatural interposition which could receive a more rational and consistent interpretation by the laws of nature. These laws may, many of them, particularly as they relate to individual substances, be quite unknown, or if known at all, known only to a few. *Ars vera est, sed pauci artifices reperiuntur.* We know the virtue of many plants, and mineral and animal substances have been made known to us only very recently, and every year we add to the number of natural agents whose virtues we have discovered. It was said of Solomon, that he cured all diseases of the mind that were brought before

him;* and if this was true, he doubtless did so in virtue of his great natural knowledge, which enabled him to speak "of trees, from the cedar tree that is in Lebanon even unto the hyssop that springeth out of the wall."†

In seeking to discriminate between the power of the spirit of man and that of the spirit of angels, we may be sure that all knowledge that does not come by the investigation of the laws of nature or through the supernatural power of revelation, is to be referred to angelic, or as we more commonly term it, demoniacal power. Of such a nature is the power to foretel events, under the present dispensation, that cannot possibly have any connexion with the past or the present state of things.

But however difficult may be the task of drawing the line between the dexterous display of the natural properties of matter and the distinct effect of the spirit of evil upon the mind, there is unquestionably a point beyond which the operation of natural laws will not carry us. Does this point turn upon the mental object of the individual, so that the deceptive handling even of natural properties is the sign for the operation of the spirit of divination to commence? That it cannot be an easy matter to detect in all cases where this spirit first begins to display its supernatural power, must be evident, or it would have been pointed out long since. But that it exists in operation as a super-

* Marcellus Donatus de Hist. Mir. lib. i. cap. ii.

† 1 Kings, iv. 33.

natural power is as certain as that there are signs by which we may detect the nature and uses of natural bodies. It was not part of the scheme of the spirit of evil to mark with clear delineation the true boundaries of that power. "In vain the net is spread in the sight of any bird." It was, therefore, an object to be borne out, that those natural properties of matter which, from peculiar circumstances, carried with them the aspect of being supernatural, should be those on which the demoniacal spirit might be displayed with less chance of being detected. This point is remarkably well elucidated by investigating the practice of charming.

One of the natural powers given to serpents in oriental countries, where birds and other small animals increase their numbers so rapidly, is that of being able, by instilling fear, or by some other means, to cause the bird to fall into the power of the serpent. This was a power, though perfectly natural, that was calculated to excite the wonder and the ingenuity of man. And lest these venomous reptiles should exercise too destructive an influence over the family of man, the Creator wisely placed the means for disarming them in certain natural productions of the vegetable world.* These alexipharmics were, doubtless, known to many oriental nations,

* It was from the arts practised upon that particular serpent called in the Scriptures *Pethen* (occurs at Psa. lviii. 4; xci. 13; Deut. xxxii. 33; Job, xx. 14, 16; Isaiah, xi. 8), that those who were supposed to be possessed with a spirit of divination were styled πυθωνες.

and though kept comparatively secret, many plants* were employed in diverse ways, either by chewing their roots or smearing their juices over the body, in such a manner as to convey to the bystanders, who were ignorant of the virtue of such plants, the idea that the individuals so acting were possessed of a supernatural power over those very creatures that were supposed to hold in themselves some power which entitled them to be worshipped.

Besides the knowledge of alexipharmics, man was able, by the close study of the habits of these animals, to ascertain the natural signs which indicated they were to be approached or not with impunity. Among these signs is that mentioned by Davy,† when the cobra de capello dilates the crest upon its neck, which is a large flexible membrane, having on the upper surface two black circular spots like a pair of spectacles, and waves its head to and fro, making a loud hissing noise, the eyes sparkling, it is dangerous of approach; and when this hood is closed, the snake never bites; neither is it known to bite even when the hood is

* Such as the *Ophiorhyza mungos* and the *Cornus* or dog-tree, mentioned by Owen, and the wild pennyroyal, *Mentha pulegium*, the bastard dittany, *Dictamnus albus*, the rattle-snake milkwort, *Polygala senega*, &c. Niebuhr states that the perfume of plants had a specific effect upon serpents: and in certain idolatrous processions, the virgin who carried the serpent wore on her head a garland of flowers, supposed to have some effect upon the animal. —*Notes in Forskal's Nat. Hist.*

† Account of the Interior of Ceylon.

spread, if the creature continues silent. This is a remarkable fact when placed by that practice of the charmers which enables them, by the aid of those loud and discordant sounds they produce from their pipes and tomtoms, to appease the rage of this animal, though in the most excited state of exasperation. The animal, by this artificial noise, would seem to be deprived of the power to produce its own natural sound, and in the inability to do this it cannot bite. It is also a fact well known that most of the larger serpents are very averse to use the deadly poison given to them by the Creator. This discovery of the effect of artificial sounds upon the poisonous serpents must have been very early known, for David makes mention of it in the fifty-eighth psalm, where he says the wicked are like the deaf adder which will not hearken to the *voice* or sound of charmers, be the charmer never so cunning. Austin* states that the Marsians, a people that inhabited Italy before the Romans, possessed the secret of enchanting serpents. Ovid confirms the expression in Job, where it is asked if "the enchanter can cause the leviathan to burst,"† evidently in allusion to his power to make them burst—

"Viperas rumpo verbis et carmine fauces."‡

And Virgil alludes to the power the charmers possessed over serpents—

"Spargere qui somnos cantuque manuque solebat."§

* De Genesi ad litter. lib. ix. 28.

† Job, xli. 25.

‡ Metamorph. Fab. 2, de Medea.

§ Æneid, vii.

The same practice is alluded to by Pindar, Homer, Cato, and a multitude of ancients.

This practice of incantation must have been in use from the earliest period, and was alluded to also by Solomon* and Jeremiah;† and the frightful and extensive practice of serpent-worship‡ that spread so widely over the great continent of India was mainly attributable to the natural properties of the animals in the first instance having been artfully concealed by the enemy of mankind, in order that the power they possessed might bear the appearance of something above nature. It is not possible to suppose this power was so extensively propagated from one nation to another by mere natural magic, or human art, nor does revelation require us to believe so. In giving power to his disciples to work miracles, Christ represents the power of the enemy as

* "Surely the serpent will bite without enchantment."—Eccles. x. 2, 11. See also Job, xl. 25, and Eccles. xii. 13.

† "I will send serpents, cockatrices, among you, that will not be charmed; and they shall bite you, saith the Lord."—Jer. viii. 17.

‡ The Egyptians worshipped the serpent in many ways, according to Herodotus, Ælian, Macrobius. So also did the Babylonians, the Phenicians, and the Arabians, the inhabitants of Asia Minor, and the Romans. The nations of the North of Europe—Poland, Norway, Prussia,—besides those of the vast continent of Asia, were all involved at one period in the worship of this creature. In the primitive church there was a sect called Ophites, and at one period no higher honour could be given to men than that title given to Alexander the Great and Scipio Africanus—viz. that they were born of serpents; or, in other words, of a power superior to mortals.

being mixed up with that of serpents and scorpions.—Luke x. 19.

That the art of witchcraft was mixed up with the use, or rather the abuse, of many herbs* and natural productions of the earth, is as certain as in the practice of charming. One who dealt in sorcery or witchcraft

* The properties of many herbs and animal productions are capable of acting upon different parts of the animal body, and so upon the mind and feelings. Thus there are medicines that are capable of exciting the physical passions,—such as *Helleborus officinalis, Cantharis vesicatoria,* and the *Juniperus sabina.* Joy and delight are the result of taking the *Papaver somniferum* and the *Cannabis indica.* Fear, anger, and rage, follow the exhibition of the *Laurus camphora* and the *Atropa belladonna ;* and loss of memory can be produced by means of the *Digitalis purpurea.* The inhalation of certain odours or vapours produced similar effects. The celebrated Pythia at Delphi was said to owe her oracular powers to the position of the temple upon a rock, through a crevice of which a vapour rose that was supposed to be impregnated with prophetic virtue. The Pythia, before she performed her office, chewed the leaf of the *Laurus camphora.* She was then seated on a tripod and fumigated with some powerful vapour, which produced convulsions and insensibility, and in many cases death. The inhalation of the fumes of the protoxide of nitrogen were found by Sir H. Davy to produce great laughter, and a rapid flow of vivid ideas. The effect of the inhalation of sulphuric ether and of chloroform is to produce temporary insensibility to pain, and unconsciousness of what is passing, and a loss of the power of motion. Other affections of the nervous system, as palsy, are caused by carbonic acid gas, carburetted hydrogen gas, sulphuretted hydrogen, chloroform, monkshood, *Aconitum napellus,* darnel, *Lolium tremulentum,* poisonous mushrooms, ergot of rye, &c. Copland saw hemiplegia produced by the root of monkshood (*On Palsy and Apoplexy,* p. 101).

was synonymous with one who used poisonous drugs. Horace, in his ode to Canidia, describes the various means resorted to by the sorceress for accomplishing her purposes. She has a magic ointment, which she uses as a charm. She prepares a poison, in which she steeps the dress of her victim. No herb or root of any virtue escaped her vigilance.

> "Atqui nec herba nec latens in asperis
> Radix fefellit me locis."

She uses the most potent plants brought from Iolcos and Iberia, and from Media.

Daniel* speaks of four kinds of witchcraft—*chartumim*, or magicians; *asphim*, or astrologers; *mecasphim*, or sorcerers; and *casdim*, or chaldeans;—as practising the art at Babylon at the time of the captivity. Before this, in Egypt, three different classes are spoken of as appearing before Moses.† These several classes pursued their different methods, and it is easy to suppose the *mecusphim* would deal more commonly with herbs and other natural products than the *casdim*, who were of higher esteem among the great men, probably on account of their practising an apparently higher and more deeply calculating system. The only detailed account in Scripture of the power of divination to effect that which no human power could do, is contained in 1 Sam. xxviii., where Saul requests

* Dan. ii. 2. † Exod. vii. 11.

a woman that had a familiar spirit at Endor to bring up the body of Samuel from the dead. Saul having lately destroyed many wizards in Israel, the witch of Endor would not at first put forth her powers till he sware to her by the Lord that no punishment should happen to her. She then, by Saul's wish, calls up the body of Samuel, and appears much frightened at the power she has put forth. When asked what she saw, she replied to Saul, "I saw a prophet or great* person (improperly rendered gods) ascending out of the earth." He said to her, what form is he of? And she said, "An old man cometh up, and he is covered with a mantle." Then Saul perceived that it was Samuel, and entered into converse with him about his kingdom, and received the final intelligence of his death.

This account of the miraculous power of the witch of Endor has been variously received and interpreted. But it is impossible to believe in the integrity of the Scriptures, whether in the Hebrew text or not, and to disbelieve the fact that Samuel was brought up from the grave. The object of recording this event was doubtless to show that there was a power above mere human skill, though not of God, by which, upon great emergencies, even the dead could be raised to life. This power was not greater, or more striking, than that which made the magicians convert a piece of stick into

* *Shophetim* is in other places, as Deut. xvi. 18, and xvii. 9, rendered judges, or a judge.

a serpent; neither is it greater than that which will yet cause a graven image to have life, and to speak. When, therefore, we seek intelligence upon matters that are beyond the ken of human power, or the spirit of life to foretel, it should not be contended that the information we receive is the product of natural agents, neither should it be affirmed that the information is incorrect, because it comes to us by the power of a forbidden angelic spirit. On both these points we have erred, and the record of Saul's unhappy dealings with sorcery will not have been made otherwise than the instrument of conveying the most important truth to our mind if it only serves to bring no longer a doubtful impression that the power to tell future events is a real power, though it proceeds neither from God nor man. Saul's end was truly brought about, although the intelligence he sought by unlawful means had previously informed him of it.

But the effect of this demoniacal spirit upon the mind of man was, by such attractive and enticing means as those we have been considering, made more particularly and universally to consist in the abuse of everything around him that was originally made for his use. By the abuse of food, the foundation of many diseases was laid. By the abuse of many natural productions wisely intended to serve some useful purpose, the number of human maladies was increased. By these and all other available means has this evil power assaulted the citadel of the spirit of man, if haply he may be captured. As disease advances, or the machinery is

rendered more and more incapable of acting with certainty or fidelity, so does man's poor spirit become more and more closely besieged till it is finally taken captive. As part of this machinery through which the operations of the mind are manifested, the brain becomes involved; and in some this injury is so great as to constitute the arbitrary distinction of insanity. Not that this term, which is purely conventional, and used in different senses to suit the convenience of different nations, is intended to distinguish those that are morally responsible from those that are not so; for doubtless the Satanic power has succeeded in fast binding the minds of countless multitudes who, like Balaam and Judas, unhappily know too well what they are about, though they cannot help themselves. They may cut themselves with knives till the blood gushes out, and cry to their gods from morning until evening, but he whom they serve is essentially a cruel god, he will not hear them. Like Balaam, too, they know that they shall see their Creator, but not nigh; they shall behold him, but not near. "What is that to us, see thou to that!" is all the consolation they can get from fallen angels, when they have been enticed into the service of sin by their attractive powers.

CHAPTER XIII.

THE SPIRIT OF ANGELS (*continued.*)

The Operation of the Spirit of Fallen Angels upon Mortal Bodies, viewed in relation to Mesmerism.

In investigating those pathological changes in the human body we designate by the title of disease, we find them to be distinguished or detected by certain symptoms. And we notice in those which more particularly involve the nervous system a class of diseases such as catalepsy, ecstacy, somnambulism, and the various forms of nervous affection comprehended under the term *hysteria*, that, inasmuch as they manifest themselves without any direct or apparent interposition of man, are accounted to be the result of the seeds of disease planted there by the spirit of Satan. The characters of some of these affections are very clearly marked, and hence their nosological distinction.

But the very unaccountable nature of the symptoms, and their deviation from general principles, usually deduced from the investigation of the psychological laws of nature, have given rise to much discussion, some doubting the possibility of their existence, while in others the greatest wonder and even credulity is created. To

dispute the existence of such cases, and the remarkable symptoms they have displayed, whether those symptoms are produced by any supposed natural causes, or by those of a more superveniont nature, is to throw a doubt over the statements of many of the most eminent men in Europe spread over some half dozen centuries, whose veracity ought no more to be doubted than we should doubt our own senses. To the nature of these symptoms the mind of the least observant or intelligent cannot fail to be drawn. To suppose it possible, without the assistance of such an organ as the eye, so exquisitely and peculiarly adapted as that organ is to the particular class of sensations it communicates to us, to receive the impression of external objects as clearly, and even more clearly, than through the medium of that organ, is, to speak for the great masses who witness such wonders, a very incomprehensible phenomenon. It is one that is calculated to effect quite as much mischief in the mind of the beholders as probably it was intended to do. It should be remembered that this extraordinary action of the nervous system, when in that state we call somnambulism, is one essentially of disease. Moreover, it is remarkable that the same kind of disease, viz. the transfer of the power of one organ to another, is one that has been recognised as being able to be induced by the application of natural substances we commonly regard as poisonous to the living body. It is stated to have been induced in a young girl in consequence of the bite of a tarantula.* The

* See the account of this case in the Lond. Med. and Phys. Journ. for 1808, by Dr. Comstock, of South Carolina.

eyes in this case being constantly closed when she was under the influence of the fit, she distinguished all objects and their colours by means of her fingers. When she recovered from the fit, all these magical symptoms disappeared, she returned to her natural feelings, and remembered nothing that had passed during the paroxysm. We have here a case to show that the train of symptoms capable of being elicited in the course of ordinary disease can be induced by the absorption of some particular poisons into the animal system. And the resemblance in the symptoms of this case with those that have commonly marked the natural or idio-somnambulism, assures us that the same morbid effects may follow the application of very different causes. The mind is thus led to infer that as different causes may induce the same morbid chain of symptoms, so the application of strong poisonous vapours to the blood through the lungs, as in the use of ether and chloroform, is really productive of the same kind of morbid phenomena, though not in every form. It is singular, too, what a close resemblance all these different morbid phenomena bear to the operations of the old wizards, for both divination and mesmerism undertook to discover the thoughts of persons placed *en rapport* with the operator. Both undertook to read or expound through the *epigastrium*, and both could transfer the outward senses of taste and smell to this part. Both either did or pretended to enter into the real sufferings of others. Both possessed a strong memory, and both foretold to a certain degree future events.

So that we have the analogy or connexion between

the effects of natural poisons and the operations of witchcraft, and we have the same analogy or connexion between the effects of natural vaporous poisons and the operations of mesmerism. In both cases, the operation of poison upon the nervous system, and the operation of sin upon the nervous system, are identical in their effects, and diseased action is the consequence. Who ever saw a clairvoyant that was in perfect health? Generally they are the subjects of scrofula in some of its forms. Indeed, I may say without any reserve, that it is impossible to cause clairvoyance in a body that is not diseased. The very circumstance of beholding a person, whose ordinary outward senses are closed both mechanically as well as morbidly, able to concentrate those outward senses into one "common sense," as it is called, transferring them *en màsse* to the region of the pit of the stomach, is so very astonishing, that many people refuse to believe what they see, and deny the possibility that such phenomena really take place. They say they are not natural phenomena, and in one sense they are not, for they are morbid phenomena. But they can be produced both in the course of disease, as well as by some other power. If this power is animal magnetism, then animal magnetism is not animal magnetism. All sound philosophers and physiologists know what animal magnetism is, and happily its phenomena are pretty well to be defined. These phenomena do not rise above the power of the spirit of electricity. But the power that produces clairvoyance is above the power

of the spirit of life, or even that of the spirit of man. But because it is a power of such awful capacities, is it well to deny it? I am convinced the cause of truth is not served by taking this course, and from ample experience am assured by so doing we give the enemies of truth an occasion of triumph. Their argument is, that which our senses see and believe must be true; therefore, if you refuse to believe the evidence of sense, you must be either most doggedly perverse and sceptical, or else there must be some mental incapacity to account for it. The phenomena of clairvoyance most indisputably, as phenomena, are real, and it would be wrong to repose any confidence in the statement of the most learned or intelligent person who denied them.

And if the phenomena are real, it is high time that we not only believed them, but that we also identified them. The last of these courses may be the most difficult one of the two to take. At present the wooden horse is not suspected, and the armed men are being courteously conveyed into the citadel unobserved. After so long a war with the human race, Satan, finding the ordinary manœuvres to be unavailing, seeks to conquer them by a stratagem. The way to prevent this is for the person exposed to these phenomena to make a few searching inquiries, and by so doing he will be amply remunerated for the trouble he may take. The first conclusion he will arrive at, after he has recognised the reality of the power that produces these phenomena, will be, that that power is stronger than man; and as it cannot be the power of God, for God

cannot be the cause of disease, there is, then, little left for the imagination to determine.

In all the great cardinal points the human mind is precisely the same that it was when Satan tried to palm his spirit of divination upon it in years gone by. The method pursued, deception, is mixed up now with the same appeals to the natural properties of matter, as it was then; and many in our days are as much charmed and fascinated by the attractive, wonder-working powers of mesmerism, as those in ancient days were by the "voice of the charmer." Now, however, we are to be certain all these wonders are only the result of the skilful adaptation of some natural agents, never hitherto dreamed of. Science advances, and we think we recognise in some new force, or some very etherial matter, a cause that will account for these marvellous phenomena. But if electricity cannot produce animal life,—no, not even the material structure with which the spirit of life is found to be accompanied,—how can it produce mental phenomena that are of a more surprising and inexplicable nature than those of the ordinary psychological description? This mode of reasoning will convince us, that mesmerism, and its dependent chain of diseased and demoniacal phenomena, have no more to do with magnetism than they have with any other natural mode of action. The very circumstance of trying to prove that the phenomena of clairvoyance are referable to a sort of metastasis of the outward senses from the brain to the great ganglionic centre beneath the stomach, is sufficient to bring conviction that such

a transfer of the natural action is no other than a diseased action, only produced by the great primary cause of disease under new circumstances. And wherever we behold a similar modification, it is impossible to dignify it with the title of physiological or psychological action without making those terms embrace a pathological meaning.

I have not the smallest doubt that many most able and highly honourable men have been misguided by these morbid phenomena in consequence of neglecting to regard them as such; and without wishing to imply in the remotest degree that they have any objects that are not entitled to be regarded as strictly scientific, I am certain they will sooner or later discover they have been taking up that which is as unworthy of their high attainments as it is of their confidence or patronage.

It would be useless, in a work like the present, to dwell at any length upon the remarkable transposition of function which the brain undergoes in such cases, or the development of such phenomena as we may witness abundantly displayed in those affected with sleep-walking and catalepsy. My object in mentioning such symptoms is to draw attention to the intimate resemblance these symptoms, as those of a diseased action, bear to that class of phenomena we recognise under the title of mesmerism. As the effects under both circumstances are precisely similar, it is not unphilosophical to infer their causes may be identical, and as no one will dispute the primary cause of all disease,

so we may imply the true cause of those particular symptoms we term mesmerism is equally a matter of certainty. And it is well to remember, that only within the last century (if we except a similar class of diseases caused by the administration or application of poisonous substances to the body) has the same spirit that in the first instance produced these symptoms directly upon the human frame, been employed through the agency of man to bring about these forms of nervous affection, so that they do not appear spontaneously and without his instrumentality. The all-important question is—Can Satan produce at the will of any human being the same set of morbid phenomena we know he has power to do under ordinary disease? This is a new mode of attack to us, and, like the old Satanic practices we have been considering, can recommend itself upon the plea of extending the power and the usefulness of man. If, by placing the body in a state of insensibility, say the mesmerisers, we can perform operations without pain, and cure diseases that would not yield to remedies under the old presence-of-mind system, the practice is both justifiable and beneficent. It may be admitted that an apparent, or even a real but temporary good, has been done by such a practice. But is that really a good, that is obtained at such a cost? If it can be shown that disease is one of the heaviest evils ever brought upon the human family by Satanic agency, does it seem wise or reasonable to appeal to the same power for its removal? and is it likely, in the removal of such disease by such a power,

that no other of a worse kind will be planted?* This would be as inconsistent as to suppose with the Scribes that came from Jerusalem, that Christ cast out devils through Beelzebub, the prince of devils. If we could picture the crowds who flocked to consult those who practised the arts of sorcery and divination, in every city and country where idolatry abounded, we should doubtless see them relieved of many of the diseases they sought to get rid of. I cannot see how else the enchanter could retain his reputation. Those who attended to such persons as sorcerers in olden times, were moreover not willing to submit to any uncertainty. They went to be cured, and so in all probability they many of them were. How different was this to the conduct of St. Paul, who, when he had received a "thorn in the flesh, the messenger of Satan to buffet him," instead of consulting Satan through the wizards and pithonesses of his day—in which case he might, for aught we know, have removed the thorn by the same power that brought it—meekly besought the Lord thrice that it might depart from him. He was not

* It is mentioned by Dr. Teste, in his *Manuel Pratique de Magnétisme Animal*, that a young man, Calliste, who was magnetized, as they call it, *five years previously*, had continued clairvoyant during the whole of that time without a single day's interruption. If this is not a spirit of divination, I don't know what is. He may bring his master much gain, but who knows the end? There is no Saviour or apostle on earth that can expel demons now, and who can tell whether the last state of this poor man will not be worse than the first?

rebellious at the answer he received, and which, as it so happened, was not in keeping with his desire.

The use of all natural means failing, in appealing to mesmerism we are making application to a power that will fix us more securely than the malady he removes. The poor woman whom the Saviour, on the Sabbath-day, released from the spirit of infirmity, is stated to have been bound by Satan for eighteen years; so that we have the highest authority for believing that disease is as much the result of Satanic power as the cases of more unequivocal demoniacal possession. But we pass on to the consideration of the other grand form in which Satanic agency has manifested itself in the world, which is recognised by the title of demoniacal possession.

The Spirit of Evil in relation to Demoniacal Possession.

It was not until "He who came to seek and to save them that were lost" was born into our world, that we hear of this form of Satanic power being developed.

The long reign of this diabolical spirit in the hearts of man was attended with the widest expanse of evil consistent with the conservation of the world. That people who, from among all the families of the earth, had been selected by God as the honoured instruments to receive his oracles and to declare his ways, had now so corrupted and contaminated themselves with the

idols of the nations, that the Mosaic law, by means of interpolations and human interpretations, had become little better than the open idolatry it was opposed to.

It was the anxious wish, the ceaseless object, the highest art of Satan, to bring the whole world under his dominion; and this he had well nigh accomplished when "the Sun of Righteousness arose with healing in his wings."

It is instructive to observe the very diverse, gigantic, and extensive power Satan appears at this time to have put forth for the carrying out of his grand purpose. Spread over four thousand years of the world's history, this evil spirit had ample time to mature his scheme, and to fasten its roots into every form of religious worship, every system of philosophy, and every variety of the human race. While its seeds were quickly spreading over the oriental world, in the eastern doctrine of two independent beings, or Good and Evil Principles, that exercised entire influence over the world and its inhabitants, these doctrines were most craftily grafted into others of an equally pernicious character, and in the form of Gnosticism were propounded to all who were not already buried in a deeper and more corrupt form of idolatry. But the art was to get God's ancient people under the spell of this deadly sway, and this was accomplished through the enticing powers of philosophy. The power of the written word was gradually weakened and silently undermined, till the commonest unwritten tradition was advanced to the

level of the written law.* The Jews had now imbibed so many doctrines from the heathens, and incorporated them into their cabbala, that there was, as far as the object of Satan was concerned, little or no difference in the end, though he had managed to diversify so much the means. What surprise could there be, under such circumstances, that when the Saviour was born into the world he was not recognised by his own people, for "he came to his own and his own received him not."

The primary object with Satan was to mystify that revelation God had expressly given to the Jews, and this was most fully accomplished in the cabbalists, who, "after the rudiments of the world," had been shipwrecked through the vain deception of philosophy.

And now did Satan make that great effort to secure his victims. He let loose his demons that fastened upon the poor Jews in every direction; so that, when the Saviour came into the world, he had not only the whole army of heathen superstition and heathen philosophy to withstand in every form, but he had, as well by his own power as by imparting it to his apostles, to expel the evil demons from the bodies of his own people, on whom they had fastened in vast numbers;† though not exclusively on them, as one was expelled from the daughter of the Syro-Phenician woman;‡ as if Satan sought to convince

* See Burton's Lectures on the Heresies of the Apostolic Age.

† Acts, viii. 5, 6, 7. ‡ Mark, vii. 26.

the world the Jews were in a more especial manner in the hands of the master whom they had been serving.

In this deplorable condition, the pity and commiseration of the Saviour for those who were thus placed is strikingly set forth in his making the very first acts of his ministry to consist in expelling these demons.*

We must not suppose that this attack of the evil one upon God's ancient people was intended to imply that these poor souls were therefore irreclaimable sinners more than all the rest. Rather may we gather from the Scriptures that many who were so affected were afterwards specially brought into covenant with God.

But while it cannot be denied that demoniacal possession was a Satanic mode of assault of a peculiar kind, that could only be expelled by the power of the Spirit of God, and that was remarkably to be distinguished from that natural disease we term insanity, still, as an eminent proof of the unmistakeable power of Satan over the mind, it would seem to be of the highest practical use. And that the devil has ever had, and still continues to hold this very mind in subjection to him in a multitude of instances, is amply proved, not only from the Word of God, where numerous instances are recorded of his demoniacal power over the bodies as well as the minds of men, but also by the history

* Mark, i. 34, iii. 11; Luke, iv. 41; in all which passages the power of the spirit that was in Christ over the spirit of demons is strongly shown and contrasted.

of man as it is brought down to us through human instrumentality, as well as by our own actual experience. Saul's mind was clearly in his hands, though ofttimes it was in this state soothed by the harmonious strains of David's lyre.* The patriarch Job, as we are expressly told, was for a time put under his power. "And the Lord said unto Satan, Behold he is in thy hand, save only his life." Yet, though subject to the more direful bodily pain and mental anguish, this eminent servant of God "feared God and eschewed evil." Job's case clearly shews us that this evil spirit is permitted to exercise his most diabolical power over the property, the children, and even the bodies of God's people, though not over that spirit in them which God has undertaken to defend and preserve. Satan thought, if he could only get the body as well as the property and children of Job into his hands, he should gain his purpose. But what was the answer of God? "Behold he is in thy hand, *only* his life," or, as our translation has it, "but save his life."† In other words, you shall have his body, and with it all its functions, but not the spirit which is in him. How much comfort this Scripture is calculated to be to those of God's people who are afflicted with any mental malady, it is, perhaps, impossible for those to conceive who have not had this great and signal trial of their faith put upon them.

Mary Magdalene, whose soul most undoubtedly was

* 1 Sam. xvi. 14—18. † Job, ii. 6.

saved, had a multitude of demoniacal spirits in her. So, likewise, had Joanna the wife of Chusa, and Susanna,* and many others, who were all healed of these evil spirits. At Gadara was one poor creature so filled with them, that when the Saviour asked him his name, his reply was "Legion;" and so tied and bound was he to the dictates of these accursed spirits, that his mind, totally unconscious of God's power, was made to behold the blessed Saviour as he will be to all those who love darkness rather than light —a terror and torment to him.† And that the mind of man being given over to Satan, whether for a short period or for the term of his natural life, does not in all cases imply that this affliction was sent as a punishment to the individual, while it proves that that mind could be again turned to the service of God by the aid of his Holy Spirit, is made evident by several circumstances recorded on this point in Scripture.‡ It would seem sometimes to bear a relation to others, and was sent, like other afflictions, "that the works of God should be made manifest in them."§ The recollection of this circumstance ought to convey great consolation to the parents and friends of many a poor stricken one, for wise but inscrutable purposes bereft of his reason or the free use of his mind. "Ofttimes," it may be said, "the evil spirit casts him into the fire and into

* Luke, viii. 2, 3.

† Mar. v. 7.

‡ Mar. v. 19, 20; Luke, viii. 2, 3.

§ John, ix. 2.

the water to destroy him;" and, in enduring this affliction, he may have been manifesting the power of the spirit of God over that of Satan.

On the other hand, through the sins and provocations of men towards whom God has had purposes of mercy, their minds have been given over, as respects this life, in some cases temporarily, and in others permanently, to Satan. Thus the Apostle Paul, finding that the heathens at Corinth, who had been converted to Christianity by his preaching, fell back into the sins which marked them so signally as heathens, while they outwardly professed the faith of Christ, judged "that in the name of the Lord Jesus Christ such an one should be delivered unto Satan for the destruction of the flesh, *that the spirit may be saved* in the day of the Lord Jesus."* The same Apostle delivered over Hymenæus and Alexander to Satan, "that they might learn not to blaspheme."† Nothing can, then, be more certain, than that, for wise and merciful reasons, the spirits of demons were permitted to take possession of the bodies of men, subject to such commands and limitations as the power and wisdom of God had ordered.

We cannot, however, be too much upon the watch-tower, or habituate ourselves too much to contemplate these fearful spirits while they are yet distant from us. Satan's favourite mode of warfare is not to seek to obtain demoniacal possession; but, short of this, to

* 1 Cor. v. 5.

† 1 Tim. i. 20.

secure the same practical ends. He more commonly confines his attack to that more circumscribed and less conspicuous form, which consists in so injuring the desires of the mind as to destroy their powers of voluntary action. This answers his purpose, and it is perhaps his most popular mode of assault. While he persuades some to partake of the forbidden fruit, because it is calculated to make them wise, a far greater number take it because it is good for food and pleasant to the eyes. It is unlikely that such food as this could be taken harmlessly or moderately, and he saw how many he should slay by this bait—*plures crapula quam gladius.* It was better for him than setting whole nations to fight with each other. This is the incipient step in all his methods of attack, to undermine and injure the functions of the body previously to making his final onslaught.

In combating the absurdity of some who would suppose the demoniacs of the Scriptures to be persons whom we should call insane, epileptic, maniac, or melancholic, Trench observes—" This has been often said, and the oftener perhaps because there is a partial truth in the view that these possessions were bodily maladies. There was no doubt a substratum of disease, which in many cases helped to lay open the deeper evil, *and upon which it was superinduced;* and, in agreement with this view we may observe that cases of possession are at once classed with those of various sicknesses, and at the same time distinguished from them by the Evan-

gelists, who thus at once mark the relation and the difference."* We need not confound the different ways with each other in which Satan has attempted to carry the citadel of man; we should act more wisely by bearing in mind how artfully he applies his knowledge in every case to the particular individual, so as to secure his end by a variety of means.

* Matt. iv. 24, viii. 16; Mark, i. 33. See his "Notes on the Miracles of our Lord," p. 150.

CHAPTER XIV.

THE SPIRIT OF GOD.

THE powerful operation of the spirit of angels, and the relation they bear to each other and to the spirit of man, having been considered, I go on now to speak, so far as revelation permits me to do, of the existence of the power and the offices of a still higher spirit,— one which is called, in different parts of Scripture, the Spirit of God, the Holy Spirit of God, and the Spirit of adoption.

It seems hardly necessary that I should use any argument, or adduce any facts, to prove the existence of the spirit of God, or the influence that spirit exerts upon the mind of man. To disbelieve the existence of such a spirit, is at once to be opposed to a very large portion of the Word of God; indeed, it is equivalent to an entire rejection of revelation. For there we find this fact in many places is put beyond the possibility of doubt.* "Know ye not," says St. Paul, to the believers at Corinth, "that ye are the temple of God,

* Luke xii. 12; 1 Cor. vi. 19; 2 Cor. vi. 16; 1 Cor. ii. 11; Eph. ii. 21, 22.

that the spirit of God dwelleth in you? If any man destroy the temple of God, him shall God destroy; for the temple of God is holy, which temple ye are."* And again, to the Romans: "But if the spirit of him that raised up Jesus from the dead dwell in you, he that raised up Christ from the dead shall also quicken your mortal bodies by His Spirit that dwelleth in you."† It cannot, therefore, be a matter of doubt whether this spirit exists in connexion with the human mind. A far more interesting question is, On what terms does it exist there? In speaking of the spirit of man after it became subject to the spirit of evil, it was shewn that, as the consequence of man's fall, he became liable to death. And in this state his spirit was excluded from the presence of God, and banished into the kingdom of darkness. In this state the imperishable spirit of man was by his own act of disobedience deprived of happiness and hope. It was, therefore, devised by the Creator that, by the aid of a more powerful spirit, man might be able to turn again unto God. For this purpose his holy spirit has from that time to this been freely offered to all who seek it in the appointed way. While this offer is held out to all, it is certain all do not accept it. And so far is the spirit of man alienated from God by the operation of the spirit of evil upon his mind, that he cannot now behold anything heavenly, or recognise even the existence of God in the sensible

* 1 Cor. iii. 16, 17; Rev. xxi. 3. † Rom. viii. 11.

and material creation around, by its natural powers alone, so much perverted and injured are all the attributes of his mind, particularly that attribute we call conscience.

The Apostle Paul, accordingly, tells the Corinthians that God has revealed his purposes of mercy to man by the Holy Spirit alone, and that as "there is no man that knoweth the things of a man save the spirit of man that is in him," so "the things of God knoweth no man but the spirit of God" that is put anew into him. All our knowledge and views of divine things, and the power to apply them spiritually to our mind, comes from the spirit of God, and not through the spirit of man. So that, although the organic apparatus of the brain in the human constitution was in the first instance for the reception of the spirit of man only, with a cerebral and mental arrangement fitted for it, yet that cerebral and mental conformation was clearly capable of being acted upon by a very different spirit,—viz. the spirit of evil, as revelation states. But this would be physically impossible, if what is commonly termed the mind were to be regarded as the spirit of man, for, in this case, it must be both the spirit of man and the spirit of God, for both these spirits take up their abode in the human mind, not to say anything of the spirit of evil.

Each of these spirits has dealings with the human mind, making it the great stage on which the rewards and punishments, the motives, examples, reasons, and inducements, are introduced and acted upon. It is the

Holy Spirit, acting on the mind of man, which alone enables him to "search all things, even the deep things of God," and the natural man, that is, the spirit of man, receiveth not the things of the Spirit of God, for they are foolishness to him; neither is it possible for him to know them, because they are only to be discerned by the help of the Spirit of God. The spirit of man is called by St. Paul the spirit of bondage, because it is in oondage to Satan; while the spirit of God in man is called the spirit of adoption, which spirit beareth witness with our spirit.

There is great confusion in the minds of many as to what proof there really is, that the Spirit of God does not dwell in every child that is born into the world. This has been a famous question for Satan's advantage. It has caused more to rest themselves in the efficacy of outward forms and ceremonies, as a sufficient substitute for inward grace, holiness, and good works, than can be told. It must, however, be remembered that the bare knowledge of right and wrong, though it comes through the conscience in man, is essentially a knowledge that comes by the spirit of evil. The demons, *τα δαιμόνια,* believe there is one God, and this makes them tremble. But why should they tremble, unless they were aware of the difference between right and wrong, and the consequences this knowledge has informed them will result from their acts? This circumstance has been greatly overlooked, and the consequence has been, men have thought they had God's spirit in them because their consciences were alive, which made them afraid. By

regarding the conscience as an attribute or mode of action of the mind, we can see how that attribute, before the Fall, acted, by producing obedience without seeking to inquire to the right hand or to the left whether it was right or wrong, as it did after that event, by the help of the Holy Spirit, when it heard "a voice behind, saying, This is the way, walk ye in it."*

The only genuine evidence we possess that the Spirit of God is in us, is by the particular fruit it produces: "Ye shall know them by their fruits." This fruit is not the product of the natural tree, but of being grafted into the true vine: as in the natural world the difference is clearly distinguished, so in the spiritual; and then, not only the conscience, but every other attribute, is brought into the field, and they all are in operation when by this spirit "the eyes of the understanding are enlightened;" so that our "reasonings, and every high thing that exalteth itself against the knowledge of God," are cast down, and every thought is thus "brought into captivity to the obedience of Christ."

Though it is a very generally received idea, there is nevertheless no authority from Scripture to lead us to suppose the Spirit of God dwells naturally in the minds of all who are born into the world. Neither is there any authority from Scripture, or any more reason in the prevalent supposition, that the outward dedication to God in baptism, or any other outward means,

* Isaiah, xxx. 21.

necessarily brings this spirit with them. "Circumcision is nothing, and uncircumcision is nothing, but the keeping of the commandments of God."* No one need be misled on this matter. The Jews had an outward ceremony of ablution, which, under the law, they were obliged to observe on pain of death.† But who will be bold enough to say the soul of every Jew who was thus unavoidably sprinkled was saved? And although this Jewish rite may not be regarded in the light of a covenant, yet the outward mark of all who were admitted under the covenant of Abraham was circumcision: and we cannot possibly suppose that all who were circumcised either had the Spirit of God in them, or were saved. This is a very grave, but rather a popular error, which in some form or other has crept into all the Christian churches, as it did before them into the Jewish church. The Jews thought that, being outwardly called to be God's people, they were "delivered" to do all kinds of abomination with impunity, and had need only to trust in outward ceremonies or in the stability of their temple, saying "The temple of the Lord, the temple of the Lord, the temple of the Lord, are these!"‡ But what says one of their prophets to them, when they thought to substitute such useless and extravagant follies for the obedience of faith: "Will the Lord be pleased with thousands of rams, or with ten thousands of rivers of oil? Shall I

* 1 Cor. vii. 19. † Numb. xix. 17—21.
‡ Jer. vii. 4, 9.

give my first-born for my transgression, the fruit of my body for the sin of my soul? He hath shewed thee, O man, what is good; and what doth the Lord require of thee, but to do justly, and to love mercy, and to walk humbly with thy God?"* The judicious Hooker has touched this point very finely, where, in speaking of the sacrament of baptism, he observes, "for all receive not the grace of God which receive the sacraments of his grace;" and again, "unless, as the spirit is a necessary inward cause, so water were a necessary outward mean to our regeneration, what construction should we give unto those words wherein we are said to be *new-born*, and that ἐξ ὕδατος even of water?"†

But we have opposed to this general distribution of God's Holy Spirit, as a necessary consequence of the outward form, some very plain Scripture authority. Christ told Nicodemus that the wind bloweth where it listeth, and thou heareth the sound thereof, but canst not tell whence it cometh, and whither it goeth. So is every one that is born of the spirit." We read that Simon the sorcerer was baptized, but after this Peter told him he had "neither part nor lot in the matter."‡

That God's spirit was offered to the antediluvian

* Mic. vi. 7, 8.

† Eccles. Pol. book v. p. 595 and 601, Dobson's edition. Nor can we with safety neglect the outward means appointed of God. By neglecting to perform the outward ceremony of circumcision upon his children, Moses nearly lost his life. (See Exod. iv. 24).

‡ Acts, viii. 13, 21.

world is certain from that Scripture where the Lord said, "My spirit shall not always strive with man,"* which it had been doing through the preaching and prophesying of Enoch,† and of Noah.‡ And that it was possessed by many from the time of the flood up to the birth of our Saviour, is shown in many parts of revelation. By the aid of this spirit, Abraham walked faithfully before God; Job was enabled to bear up patiently when the enemy came in upon him like a flood; and David, and Samuel, and Daniel, and many others, experienced its powerful aid in subjecting the strongest efforts of Satan to its power. Moreover, that it has been offered in every age to the rebellious and the wicked, is clear from what David said in the 68th Psalm, v. 18; and Stephen told the Libertines and Cyrenians, and those who disputed with him, that they always resisted the Holy Ghost.§

As man was in the first instance created with the power to choose and to act voluntarily, it could not be said that his fall was brought about by his own inability to resist temptation. It was purely a voluntary act that he disobeyed the command of God; and the act of the rebellion was the more unnecessarily heedless, from the fact of his not knowing the consequences or the difference between good and evil. All he did know was, that, if he ate of the tree of the knowledge of good and evil, he should surely die, because God had commanded him not to eat of it.

* Gen. vi. 3. † Jude, 14. ‡ 2 Pet. ii. 5. § Acts vii. 51.

Now, again, when God offers man the help of His Holy Spirit to enable him to resist the power of Satan, it is only offered upon conditions, and given to those only who ask for it. It could not be otherwise, or the dispensation under which man is now placed would be removed: for it must be obvious, if all received the Holy Spirit, Satan would be comparatively bound, and could not hold the world in the slavery of sin and the fetters of unbelief, in the unequivocal manner in which we see he does.

But doubtless the Holy Spirit is given in very different measure to all who receive it, and even to the same individual at different times. It evidently strives with many who are not influenced by it to the production of its fruits, and we are warned not to quench the Spirit of God that is in us, as it is by its instrumentality that we are sealed or preserved unto the day of redemption. It is given in different degrees, and in a different manner, to all who receive it. And the Apostle Paul tells us there are diversities of spiritual gifts under its ordinary influence. When received into the mind, it does not operate uninterruptedly in any one, but appears to act there as if confronted by an opposite spirit. The conflict of these two spirits in the mind of the believer is beautifully and clearly described by the same Apostle: "With the mind I myself serve the law of God after the inward man; but I see another law" (*the spirit of evil*) "in my members, warring against the law of my mind, and bringing me into captivity to the law of sin" (*the spirit of evil*) "which is in my

members. For what I would that do I not, but what I hate that do I: for the good that I would, I do not; but the evil that I would not, that I do." Thus the "flesh or spirit of evil lusteth against the Spirit of God, and the spirit against the flesh, and these are contrary the one to the other." This state of contention between what St. Paul calls the law of the members and the law of the mind is caused by the presence of the Spirit of God and the spirit of evil, through which the inward working and striving of the spirit of man are clearly to be traced.

The Holy Spirit was also, before the ascension of our blessed Saviour, given in greater measure to the Prophets, and after that event it was poured out in a miraculous manner upon the Apostles and the first Christians; so powerfully as to enable them to prophesy, to heal diseases, and to cast out devils. Here the Holy Spirit exhibits a power that far excels that of angels, whether holy or fallen angels. Not only could this Divine Spirit foretel future events, and raise the dead to life, which the fallen angelic spirit of evil could do, but it could heal the sick and cast out devils, which those demoniacal powers could not do. That these last properties of the divine Spirit of God were of no ordinary importance is evidenced by their forming the chief occupation of the blessed Saviour while upon earth. Everywhere he went, he healed the sick and cast out devils. In attempting to do this, even after the disciples had received the spirit to do so, they on several occasions failed to effect a cure;

which the Saviour attributed in one or two instances to want of faith, and in another to the neglect of prayer and fasting.

These were miraculous powers of the Spirit of God, but necessarily displayed, to convince us that here reside the elements of all spiritual strength, a power that is able to bear witness it is from God, "by signs and wonders, and with divers miracles and gifts of the Holy Ghost." "For to one was given by the Spirit the word of wisdom and knowledge; to another the gifts of healing, by the same Spirit; to another the working of miracles; to another prophecy; to another discerning of spirits; to another divers kinds of tongues; to another the interpretation of tongues; but all these wrought that one and the self-same spirit, dividing to every man severally as He would."* This was a wonderful power bestowed upon the first Christians, which they had so great need of, on account of the almost overwhelming spread of the spirit of evil. By this power it was that the great mystery of Christ, which in other ages was not made known to men, was revealed to his holy apostles and prophets after his ascension.

The chief office of the Holy Spirit is to enlighten the eyes of the understanding, that we may know what is the hope of the calling of God, and the things that are freely given to us of God.

It is the power to use the high attributes of the

* 1 Cor. xii. 8, 11.

mind, perception, judgment, memory, conscience, will, &c., in so extended a manner, as that the feelings, sentiments, and desires, are made to come fully within the influence of the Holy Spirit, which constitutes that wise and understanding heart spoken of in revelation. This spirit, then, produces the fruit of goodness, righteousness, and truth; love, joy, peace, long-suffering, gentleness, faith, meekness, temperance. It produces, also, hope and faith, and above all, love to God. When we place this long catalogue of heavenly qualities by the side of that manifest and numerous list of the works of the flesh, or compare it with that expression in Genesis where God says the whole imagination, purposes, and desires of man's heart were only evil continually, we must at once collect this truth, and conclude that, without the assistance of God's Spirit helping our infirmities, we cannot resist the downward tendency of every part, faculty, feeling, and attribute of the natural mind. What is called faith in God, and the power of His Spirit, does not consist in the bare intellectual reception of these facts relating to man's final salvation. St. Paul clearly describes to Titus the difference between the belief of the mere intellect and that in which the whole moral portion of the mind is also combined. He says, "they profess that they know God,"—that is, with the intellectual part of the mind, "but in works they deny Him,"—that is, in the moral part of the mind, "being abominable and disobedient and unto every good work *void of judgment*." The word ἀδόκιμοι, rendered in our translation "reprobate," in its active

sense, according to Macknight, means *undiscerning, undistinguishing, void of judgment;* hereby implying that the perceiving, and judging, and comparing powers in man, are, as I explained in the eighth chapter, capable of being applied over the entire range of the moral part of the mind of man. The same Greek word occurs in Rom. viii. 28: "God gave them over to a reprobate mind," *εις ἀδόκιμον νοῦν,* a mind that would not have power to reflect upon, understand, or judge of the consequences of their conduct. Like Jannes and Jambres who withstood Moses, so, Paul tells Timothy, in the last days there will come those who "resist the truth, men of corrupt minds, *having no judgment concerning the faith,* ἀδόκιμοι περὶ τὴν πίστιν. And, as the consequence of the Fall, the mind is ever liable, even though under the power of the Holy Spirit, to be assaulted and blinded, and even led away, though it be only for a time, by the spirit of evil. David says: "Nevertheless, my feet were almost gone, my steps had well nigh slipped." When he saw the prosperity of the wicked, he was transiently invidious of their position, and in this state of mind found it impossible to understand why this should be; nor did his understanding become enlightened upon the matter till he asked of God. Then he beheld it clearly enough. With his judgment enlightened by the Holy Spirit, he saw clearly how suddenly these would come to a fearful end: and this leads him to break out into a strain of renewed faith: "Nevertheless, I am always by Thee, for Thou hast holden me by my right hand; Thou shalt guide

me with thy counsel, and after that receive me unto glory."

The naturally irrecoverable state into which the mind of man has been thrown by the fearful and tremendous effects the spirit of evil has had upon it, should excite no surprise in that mind when it is told that it can no longer do anything that is pleasing to its despised Creator, by the sole unassisted efforts of the spirit of man. "It is not in man that walketh to direct his steps." All his righteousness in the eyes of an insulted and unreconciled God, are as filthy rags, and his poor and utterly unavailing attempts to do anything that is right in the strength of his own spirit, are, we are plainly told, regarded in the same category with the sins of his fallen nature. We cannot, then, marvel that we must be born again, and that we must have the aid of the Spirit of God to help our infirmities, and to enable us to seek for strength where only it is to be had. "For we know not what we should pray for as we ought, but the spirit itself (the Holy Spirit) maketh intercession for us according to the will of God."

The necessity of having this spirit in us, if ever we hope to see the face of God in glory, cannot be stronger or more convincingly put than on this wise. God has most mercifully revealed to us that we cannot enter that rest which is prepared for all his people, but by one appointed way. Jesus said, "I am the way, the truth, and the life: no man cometh unto the Father but by me." The same revelation that conveys this

inestimable truth to our mind, informs us also that without the aid of this very spirit, now under consideration, no man can say that Jesus is the Lord, and therefore without its help we cannot go to Him that we might have life.

INDEX.

ERRATA.

Page 87, line 14, *for* "at the period in the Genesis of Moses," *read* "at the period *stated* in the Genesis of Moses."
Page 237, line 9, *for* "material utility," *read* "material *entity*."

THE END

WILSON AND OGILVY, 57, SKINNER STREET, SNOWHILL, LONDON